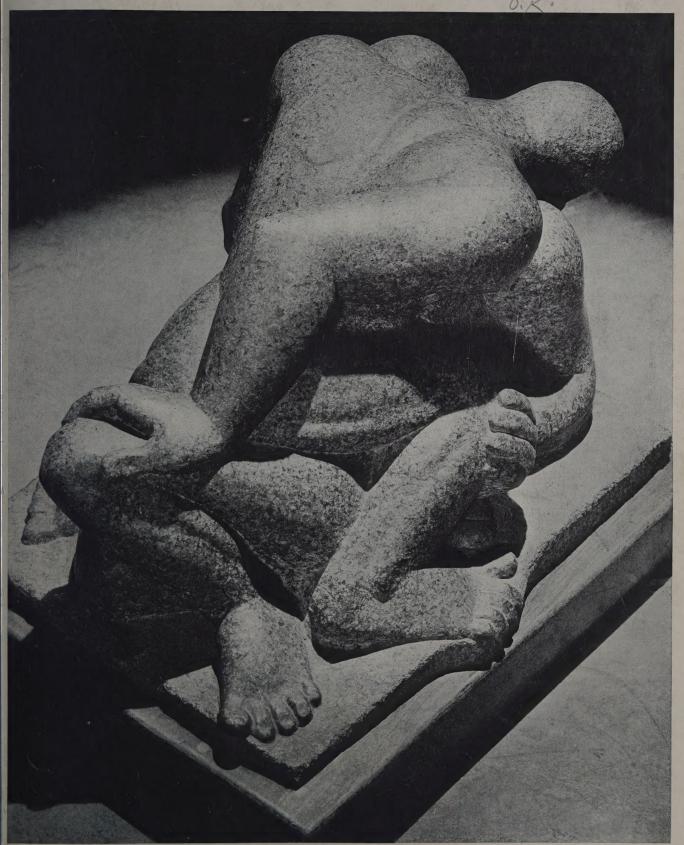
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VOLUME 33

NUMBER 9

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### THE AMERICAN FEDERATION OF ARTS

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PREVIOUS ISSUES LISTED IN "ART INDEX" AND "THE READER'S GUIDE TO PERIODICAL LITERATURE"

### CONTRIBUTORS

EVEN IN REPRODUCTION one can discern the character and strength in the sculptures of Ahron Ben-Shmuel. Although he speaks objectively, his own work furnishes excellent evidence for his generalization that "every artist worth his salt has added something workmanlike to the current knowledge about his craft." But his contribution has not rested there. He is one of the ablest and most thoughtful of contemporary American sculptors. His article which he calls "Carving: A Sculptor's Creed" is good red meat, well seasoned.

Philip Ainsworth Means, who contributes his first article of four on Andean art to this issue of the Magazine, has a record of achievement in his specialty. His published works appear in the general bibliography which follows the text of his article. In the spring of 1914 he went to Peru for the first time as assistant on a Yale University-National Geographic Society Expedition, where for five months he worked under E. C. Erdis. Subsequently he made several journeys to Peru. In the years 1920 and 1921 Mr. Means was Director of the National Museum of Archeology in Lima. Many years of study and research have supplemented his first-hand knowledge of his subject. Mr. Means' second article is scheduled for November.

MANY ARTICLES BY F. A. Gutheim on architecture and planning have appeared in the Magazine in the past eight years. This month Mr. Gutheim contributes the first critical survey of the TVA's architectural achievement attempted since all the important structures were either completed or far enough along to reveal their final shape. Mr. Gutheim's article was written after an extensive trip through the Tennessee Valley. Since the whole process of design in the TVA is one of anonymous collaboration no attempt is made in the text or captions to credit the individuals concerned. But for the record we want to say that the responsible persons are: Roland A. Wank, Principal Architect; Harry B. Tour, Senior Architect; Mario Bianculli and Hiram Ostrander, their assistants. The architects work under the direction of Theodore B. Parker, TVA Chief Engineer and Earle S. Draper, Director of Regional Planning Studies of the TVA. Most of the photographs reproduced with the article are by Charles Krutch, Photographer and Chief of the Graphic Arts Service of the TVA.

Lois Wilcox taught for several years at Sweet Briar College in Virginia. Her article this month is based on her discoveries there. Miss Wilcox paints and makes prints herself; she firmly believes that art teaching in any fundamental sense

Articles in the MACAZINE OF ART represent many points of view. We do not expect concurrence from every quarter, not even among our contributors; we believe that writers are entitled to express opinions which differ widely. Although we do not assume responsibility for opinions expressed in any signed articles appearing in the MACAZINE OF ART, we hold that to offer a forum in our pages is the best way to stimulate intelligent discussion and to increase active enjoyment of the arts.—The editors.

can be done only by those who have undergone the arduous discipline of actual productive work in the field. Miss Wilcox contributed "El Greco: Pages from a Painter's Notebook" to our June, 1938, issue.

### FORTHCOMING

NEXT MONTH WE will publish the first installment of Ernest Brace's two-part article on the fellowships given in the arts by the John Simon Guggenheim Memorial Foundation. The Foundation has been granting them for fifteen years and we thought it was high time to analyze the results and the procedure. We assigned the task to Mr. Brace who has worked long and diligently. We are glad to present the material when it may prove useful to artists sending in their applications ahead of the October 15 deadline.

THE OCTOBER NUMBER will also contain Edward Reed's article on the work of Howard Bay. Mr. Reed wrote about Albert Johnson for our May issue and will follow his next month's article with several more—all reviewing the accomplishments of the youngest generation of American theatre designers.

ALSO IN THE offing is Forbes Watson's article about the survey exhibition of American art, presented by the Carnegie Institution, Pittsburgh, instead of the once customary International. (Mr. Watson will continue to do his one-page editorials.) In a month or two Marvin Chauncey Ross of the Walters Gallery, Baltimore, will present the strange case of two medieval French heads, and how they suffered at the hands of restorers. Dorothy Lefferts Moore's article "Is Housing Architecture?" is also scheduled for early publication. After looking around at housing projects she answers the question in the affirmative.

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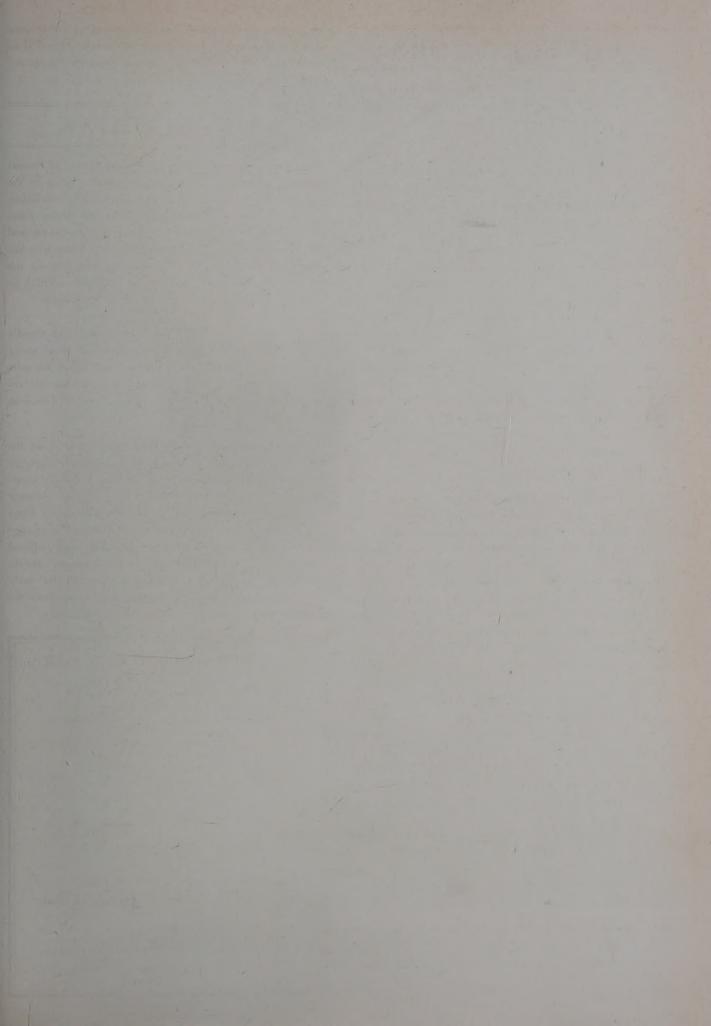
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Interior of Generator Hall, Pickwick Landing, Alabama. Tennessee Valley Authority. You stand on a little balcony to get this view inside

Interior of Generator Hall, Pickwick Landing, Alabama. Tennessee Valley Authority. You stand on a little balcony to get this view inside one of TVA's eight power houses now in operation. The gray-green and sulphur-yellow concrete walls form an agreeable accompaniment to the cylindrical generator housings of steel, painted deep blue-green and aluminum. The bases are stainless steel. Tile floor is medium gray

## THE ARTIST'S CITIZENSHIP

MANY LADIES AND gentlemen punch time-clocks, symbolically or actually, and dream of a heaven where such monuments to efficiency will not exist. Too many of the punchers, when they think of the artist, do so with a combination of scorn and envy, scorn because he is odd and they don't understand him, or why he does what he does, and envy because they think he lives outside the bounds of discipline. At this particular time when we most need the enlightenment that the artist alone can give us it is especially unfortunate that he has not a larger understanding public,

If the clock punchers were told that the artist (using the word strictly) is more efficient than the brightest office manager and more disciplined than the most inveterate office worker, they wouldn't believe a word of it. Yet I believe this to be true. I am convinced that the artist is the most practical and most disciplined of citizens. I am not, of course, referring to the army of incompetents who live and die masquerading as artists, but to serious men and women who, in a lifetime of disciplined work, produce a consequential body of art whether it be music, painting, sculpture, or writing.

These men and women in the many fields of art are our most consistent, strongest and most expressive enemies of regimentation, the same regimentation with which, if England falls, we shall come to blows. Let those who wish to, sneer at "free expression" as something too vague and individually self-indulgent to be encouraged while we are living in the shadow of a defense program not yet beyond the embryonic stage; but let them realize that free expression is the cornerstone of democracy.

I am not discussing the free expression of the perpetual amateurs who confuse criticism with censorship, nor the loose talk of the untrained who defend their inabilities as "self-expression." These have brought the phrase freedom of expression into ridicule, but they have not affected the sound principle beneath it. I do not refer to irresponsible freedom but rather to what Mortimer J. Adler calls in *How to Read a Book* "freedom through discipline."

That brings me back to my claim that the artist is the most disciplined of citizens. To punch a time-clock day in and day out, on the dot, and then to do a good day's work does require discipline. An admirable discipline. But suppose there were no time-clock, no office manager, no one who cared whether one worked or didn't work. That is the typical position of the artist. Yet he works. His own boss, he is only satisfied with his best. The difference between the

discipline imposed from without which the office and factory worker sees exercised on every side of him, and the discipline developed from within which the artist practices without an audience of fellow workers to set him an example, is incalculable. The artist's discipline has a quality not to be measured by the tools of efficiency.

There is no such thing as an undisciplined artist, no freedom of expression without discipline. Every artist knows this. He remembers the time when he tried hard to express something and couldn't say it because he didn't know how to use his tools. That's why an artist's last picture is so much freer than his first. And after the tools are mastered the artist faces the lifelong, watchful, scrupulous discipline of self-criticism which drives him forward to try to overcome the fearful shortcomings of his mastery.

To throw away something which you know you can do in favor of something that you see beyond but can't yet do; to set yourself a higher standard when everybody accepts the work—that is discipline. To be adamant to praise when you and you alone see how short of the aims is the result—that's really being an artist.

Every great work of art keeps before those who can read it the ideal of freedom of thought and of expression. Consequently at this time it is of the highest importance to American civilization that the artist should have the support of a larger public which feels the need of possessing his work. Since our battle now is with the barbarians of regimentation one intelligent way to save us from mental and physical goose-stepping is to recognize the importance of the artist as a citizen. He is far too necessary to our defense to drop even momentarily. On the contrary, now is the time, and it cannot be repeated too often, for America to increase the artist's real public and to intensify his support.

We have boasted of being the richest country in the world. We are even rich enough to dally with isolationism when the sources of our civilization are being bombed by the barbarians. It would seem then that we might be rich enough to find the means for the complete defense of our freedom. If we want to defend democracy from the enemies within and without our gates there is no surer way than to support those bulwarks of liberalism our artists in whatever field they may work. We can count on them to fight the very spirit of regimentation and to uphold the new standards of discipline which all of us know we must develop.—FORBES WATSON.

PAGE 501

# CARVING: A SCULPTOR'S CREED

#### BY AHRON BEN-SHMUEL

IT FIRST HAPPENED in my father's shop. He was carving the head of a leopard, getting ready to mount the skin over it. I thought I could do something like that, too; I made a fox out of bits of wood and carved it (with my eye on the model, a head and pelt just come in from somewhere upstate) as neatly as I could. I can remember touching the thing from time to time, finding that my fingers could tell me as much about its forms as my eyes.

This was an exhilarating experience. I never forgot it. It was for me the discovery of what psychologists call a sixth sense; a muscular thinking out into moving forms of the complex of impressions which the other senses have received. And which achieves in the doing a continuous check upon the correctness of those impressions.

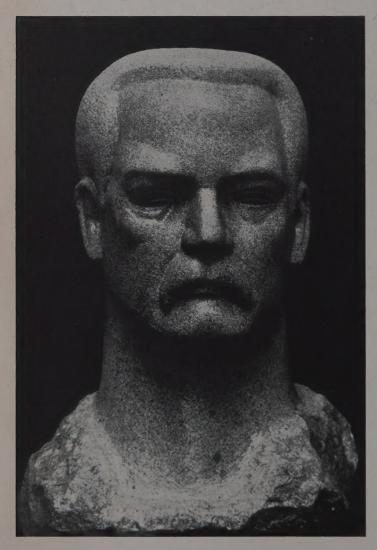
There is, of course, a much wider implication to this process. It grows slowly out of practice in any craft when the craftsman works his idea directly in the final material or medium; and from such practice, invariably, arise new methods, new techniques; every artist worth his salt has

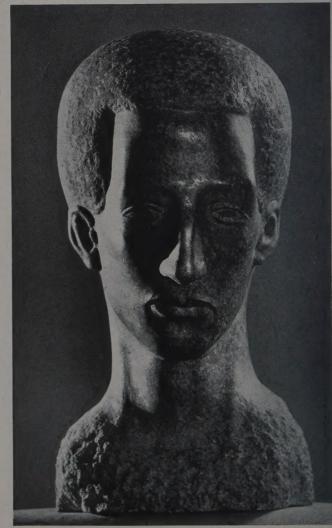
added something workmanlike to the current knowledge about his craft. This technical improvement may be incidental to the impact of a strong personality. Or it may be fundamental,—the necessary precondition to his achievement. In any case we always find them together,—a man with something big to say and a new way of saying it.

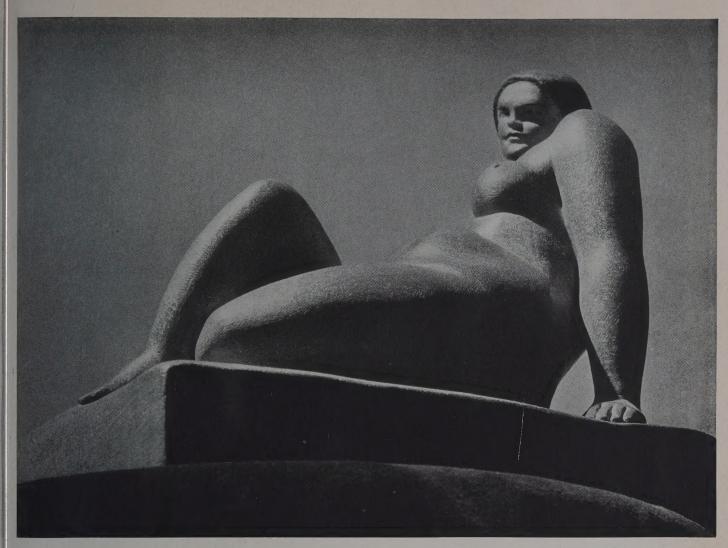
My own conviction is that the latter statement is the truer one. And the more useful. Craftsmanship is the foundation of expression in every art. We cannot plan to be Michelangelos but we can attain a skill and fluency of expression (that is to say, workmanship) which will carry us to the limits of our vision. This is no small achievement, as any critical examination of contemporary work will reveal. How many good things one finds struggling for life in the awkward hands of their creators!

When one works in a resistant material one is compelled to consider the mechanical as well as the purely expressive or representational consequences of each move. In my first try at sculpture the long taper of the fox's nose taught me how to work with the grain of my material, and the varying texture of the wood forced me to cut carefully at details—

HEADS BY AHRON BEN-SHMUEL. Left: THE SCULPTOR'S FATHER (WESTERLY GRANITE, 1923). Right: YOUNG MAN (BARRE GRANITE, 1929)







Above: AHRON BEN-SHMUEL: BERBER GIRL (BRONZE, 1929) COLLECTION OF THE SMITH COLLEGE MUSEUM OF ART. Right: MEXICAN MADONNA (1927), CARVED IN FIRED CLAY BY BEN-SHMUEL

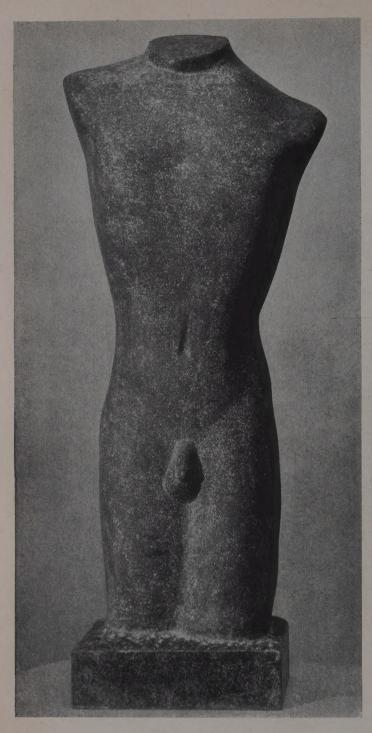
the eyes and ears. It was at that time as if the fun of carpentry—putting things together with hammer, plane, and chisel—had been added to the fascination of sketching with a pencil or in color. In fact I did not discover until I went to school long after and began fooling with clay, a transfer medium, that these two things could be separated.

My father must have thought the result good, for he sacrificed the fox's skin upon it. That was the bottle of champagne which launched me out as a sculptor. Then he mounted the whole business on a board and set it up in the parlor where the neighbors couldn't help but see it. I began with a public as well as a patron. I've been carving, consequently, ever since.

I carved in many materials after that. On sticks of chalk which I'd slip into my pocket at the classroom blackboard—old men with wavy long beards and hair running down to the end of these chalks because that was a good excuse for meddling with every inch of the surface, I suppose. On pieces of marble, limestone, sandstone, picked out of demolition rubbish; there's always an old house being pulled down somewhere in New York, and the older it is the more likely you are to find some good stone in it.

For my range was limited. I learned to do a few things





easily and the grown-up people admired them and that was enough. The carving of these simple figures of old men and animals became almost automatic, hence out of it grew a continuous search for new materials. Like most youngsters who begin without guidance, without a sophisticated audience which asks for fresh subjects, odd techniques, novelties, or imitations of standard works, I was much more interested in the craft of sculpture than in its subject matter. The achievement seemed to lie in how it was done; the rest seemed (such were my standards) no trouble at all.

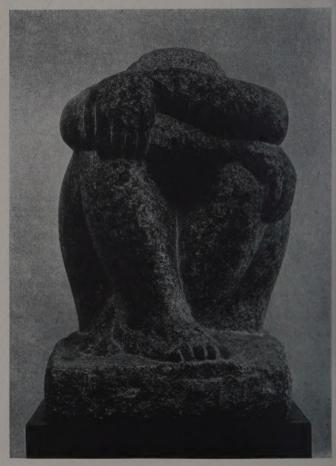
When the time came for me to choose a way of earning a living I proceeded naturally to the stoneyards, where I served the usual three-year apprenticeship as a monumental carver. It was a good school. Progress and pay went hand in hand; the day's bread was measured in inches of stone. I

learned how to do my job with a minimum of waste motion and fuss. For I was trying to keep up with my own work all the time, and my leisure was useless to me unless some energy could be saved out of the day's toil. It was a pretty hard routine at first.

During the intervals between jobs at the yards I did a great deal of work for other sculptors, reproducing their models in stone. This was more interesting than monumental work and better paid too; it gave me time for study in the museums. Here I found my real school. The natural history collections (for primitives) and the art museums (where I studied through the Egyptians and the archaic Greeks and then the Florentines, Michelangelo especially) taught me to see the underlying unity of craftsmanship which relates these sculptures—so varied in feeling, treatment, and theme—to one another. You might say, transposing into terms of speech, that the syntax may differ but the words are always the same.

On the other hand I discovered that works done in or copied from models conceived in amorphous materials like clay were characterized by a great superficial variety of mannerisms: surfaces, forms, proportions twisted, pitted or polished altogether as the whim of the individual artist—sometimes, the prejudice of patrons, the theories of archeologists and historical costumers—at other times, suggested. In periods when modelling dominated sculpture, notably among the later Greeks and the Romans and through the

Left: BEN-SHMUEL'S TORSO OF YOUNG BOY (BLACK GRANITE, 1929). COLLECTION OF RICHARD DAVIS. Below: BEN-SHMUEL: SEATED WOMAN (GRANITE, 1932). COLL. MODERN MUSEUM





AHRON BEN-SHMUEL: PORTRAIT OF A YOUNG WOMAN (SCOTCH GRANITE, 1929)



AHRON BEN-SHMUEL: DANCER (TENNESSEE MARBLE, 1935)

eighteenth and most of the nineteenth centuries in Europe, all considerations of craftsmanship disappear. And are replaced by a craft: intricate extemporisations, simulations of songs and mottoes and prayers, celebrations of accepted attitudes in the large and decorations of them in little. The sculptor, if you can call him that, with his ball of formless stuff hires himself out to the philosophers and pedagogues, illustrates their dogmas, and apparently kids himself into believing that he creates unfaltering significance when he follows their formulae.

Some of the men for whom I worked commemorated Indians, the vanishing buffalo, the Declaration of Independence, the Civil War, and the plays of Shakespeare. These figures depended for their meaning on the inscriptions written across their pedestals, as if nothing could be interesting in sculpture unless it were the offspring of a catalog and a history book. But bad as the result was, sculpturally, there was some excuse for it; those who worked in this style believed that their themes were of eternal significance, more durable than time and harder than their own stone. To call a woman Helen or Psyche or Juliet, to bulge and stretch, discreetly, all forms into the accepted symbols for these titles seemed to them a better way of giving their figures a significance consonant with the permanence of the materials from which they were made.

Yet curiously their intentions were workmanlike, up to a point; the point at which workmanship rises to the power of being sufficient unto itself, of dispensing with reinforcements of meaning from other sources. They quite consciously carried their art that far, and stopped. We now stand amazed at their skill, even though we are puzzled and repelled by its





Above: BEN-SHMUEL: SAINT SEBASTIAN (BRONZE, 1932). THREE COP-IES IN COLLECTIONS OF A. BAIRD, J. WICKS, P. OWEN. Left: BEN-SHMUEL: PORTRAIT OF A YOUNG WOMAN (TENNESSEE MARBLE, 1932)

sterility. They knew what they wanted, and how to do it! Most of us know neither the one nor the other. The symbols and slogans of yesterday are blasted by the newspaper headlines of tomorrow; the common man who defended his destiny behind barricades and finally achieved it at the muzzle of his fowling-piece gives way to the anonymous engineer who rides overhead absorbed in the manipulation of camera, slide rule and bomb. The mental attitudes by which men will live in the future are being forged out today, but to us the effect is necessarily one of chaos, and the artist can no longer kid himself into feeling that through association with certain ideas his work will become involved in the process of change itself. We are the witnesses, not the prime movers, of our time.

Music, the most popular of the arts, has abandoned the programatic methods of the last generation and returns to

its basic material: rhythm. Such a return does not mean, among other things, that swing is simple and crude; it is as matter of fact both complex and subtle. And wordless,—just music. The artist is freed to exploit all the resources of his medium, and the people to enjoy the sheer impact of his art.

I think there's a lesson in this for sculptors. In an art like our own, which is for the most part institutionally patronized, it is only too easy to overlook the profound character of the change in ideas which has just taken place. Many of us are still living in the nineteen-twenties (along with the jurors and trustees) when artists divided themselves into two groups: those who commemorated or condemned various ideas about social progress, and those who, persistently searching in their own minds, brought forth in three dimensions their personal and peculiar mental entrails. It is just as easy to commit suicide, esthetically speaking,



BEN-SHMUEL: BOXERS (COOP-ERSBURG GRANITE, 1937).





Above: BEN-SHMUEL: RECLINING FIGURE (BRONZE, 1932). COLLECTION EDWARD M. M. WARBURG. Left: BEN-SHMUEL: INVOCATION (COOPERSBURG GRANITE, 1939). DONE WHILE THE SCULPTOR HELD HIS GUGGENHEIM FELLOWSHIP. SHOWN AT PHILADELPHIA MUSEUM THIS SUMMER

by trying to embrace the whole world as it is by locking oneself up in an ivory tower.

Carving is the basis of sculpture. The primitives, whom we so much admire today, carved directly in final materials. That amazing sense of form, so plastic and exact, was the result of their preoccupation in resistant media with the final problems of sculpture. Later, modeling, because of the brilliant effects so easily achieved thereby, came to dominate the art. We find this to be especially true when one culture overmasters another, as the Greek did the Roman, or as the whole of classical antiquity did the Europe of a century ago. Eclecticism is the modeler's true forte; he can copy anything, and he usually does. In recent times this lack of originality has been disguised by the abandonment of historical in favor of what one might call psychological eclecticism. We have seen hundreds of different styles come and go, have seen them drummed up as the beginning of a new direction in art to subside into merely a new career in sculpture. Style itself has been the one thing we have rarely seen.

I believe that the only way in which we can avoid the sensationalism of headline philosophers and the sterility of isolated esthetic cranks is by a return to the craftsmanship in sculpture, the problems of the medium. For to argue by my own experience, if the completed work gives the onlooker a fraction of the joy I had in the making of it he'll be satisfied. And I will, too.





Stone Sculptures from Tiahuanaco. These represent the Introductory Culture known as Tiahuanaco I. Probable date before A. D. 600. The two on the left are probably older than the one on the right. The contrast between them shows the progress made within the limits of Introductory Culture. (After Posnansky)

# PRE-COLUMBIAN ANDEAN ART

### PART I. PERIODS AND STYLES

#### BY PHILIP AINSWORTH MEANS

DURING MANY DECADES prior to 1930, specialists in art and experts in "classical" archeology led the general public falsely to believe that the artistic productions of the native race of America, no matter how beautiful or how impressive they might be, were not art; they were proclaimed to be "mere ethnology." There still remains in some quarters, surprisingly in the Metropolitan Museum of Art, for instance, a stubborn tendency to cling to the now discredited refusal to acknowledge the artistic worth of even the most admirable native American art. Nevertheless, certain of our art museums, notably that of Boston, began sixty years ago to resist this dictum by proudly displaying, as art, examples of the workmanship produced by members of this or that native American culture. For some reason this bold, but sporadic, defiance of a then dominant dogma made no marked impression on the public mind, at least not for a long time.

It was the eye-opening and mind-opening show at the Louvre in 1930 which first made it clear to many that native American art certainly is art. That show was the first gun in a campaign for a drastic change of popular attitude. Our museums quickly followed the example of the Louvre. Countless people were astonished and deeply impressed by the magnificent show held at the Museum of Modern Art in New York in 1933, and they were convinced by it of the high artistic merit of native American art. Similar exhibitions continued the good work in many other places. Finally, in the opening months of 1940, the Fogg Art Museum, Harvard University, held the most imposing show of the kind yet seen, and thereby it outmoded the old concept that native American art is ethnology, but not art.

In this article I attempt to present a general survey of Andean art from the standpoints of geographical distribution and of chronology of the sundry styles of art in the Andean area prior to the advent of the Spaniards. As the term is used here the Andean area is that part of South America which extends from northern Ecuador down through Peru and western Bolivia into northwestern Argentina and northern Chile. (See the map herewith.) Geographically this area is marked by the presence throughout of three roughly parallel natural zones. On the west, along the Pacific Ocean, there is the coastal zone made up of fertile valleys of rivers running westwards from the Andes to the sea, with extensive desert regions between them. To the east of the coast there is the Andean highland zone, made up of lofty ranges of mountains with high-lying plateaus between them. Finally, to the east of the highlands, there is the jungle country with its dense forests and its mighty rivers rushing towards the Atlantic Ocean.

This vast tripartite area is unified from the historical standpoint by the fact that, as we shall see, it has twice been the terrain of far-reaching imperial cultures which deeply influenced and strongly modified the numerous local cultures with which they came into contact. This is made known to us not only by folklore, but also by general archeology and, above all, by the known distribution of types and styles of art.

We now come to the question of artistic styles in the Andean area and to that of their relative chronological positions. These two questions are so intimately linked with geographical considerations that they cannot be discussed sanely apart from them. The general art-loving public and, especially, the professional staffs of museums owning small or great collections of Andean antiquities (as to the proper classification of which those staffs are sometimes sadly at a loss) must be provided here with an illustrated scheme which shall show forth the main facts concerning the distribution and sequence of Andean styles. In performing this task I shall omit discussion of certain styles and sub-styles whose chronology and relationships are still far from clear.

To begin with, we must note that, underlying all the more developed cultures of ancient America, there was a stage of culture usually called "the Archaic", but perhaps more accurately to be labeled as "the Introductory." It was a cultural stage definitely above the primitive or hunter-andfisher stage to which the earliest immigrants from eastern Siberia to Alaska belonged.

Its superiority is manifested by the facts that people on the Introductory (or Archaic) plane were semi-sedentary or even sedentary, rather than nomadic, that they depended for a part of their food on a rudimentary kind of agriculture which supplemented the victuals got by hunting and by fishing, that they built semi-permanent or permanent abodes of stone and of wood, that they made at least simple kinds of pottery and textiles which supplemented the older crafts of basketry, wood-carving, and skin-dressing. In short, Introductory culture contained the humble beginnings of many arts which, under favorable circumstances, could be and were later brought to a more elevated point of development.

As reflected by its art, Introductory culture displays wide variations within its own limits. In one form or another, however, Introductory culture is found in tangible shape not only in most of North America, but also in Mexico and Central America, as well as in all parts of South America except in the extreme south, where Primitive culture alone appears.

From this we may deduce that, at some postulated period in the past, nearly all culture in America was Introductory.



PHOTO COURTESY AMERICAN MUSEUM OF NATURAL HISTORY



ABOVE: Early Nazca Portrait Pot. Probable date about A. D. 300-400. Typifies the carry-over of realism from Early Chimu into Early Nazca art. LEFT: Early Chimu Portrait Pot. Probable date about A. D. 300-400. Typifies essential realism of Early Chimu art

Whether or not the introduction led to anything further depended upon the degree and kind of the environmental stimulus proffered by any given region. That is, in regions where the struggle to maintain life was so intense as to preclude the possibility of that leisure for constructive thought from which alone progress can spring, no advancement was made and the people never passed beyond Introductory phase. Furthermore, in regions where the environment was specially harsh, as in the northern and southern extremities of America, culture either remained Primitive or else relapsed from the Introductory phase into the Primitive.

In slightly more favored regions, on the other hand, and in much more favored, leisure for dynamic collective thought was possible in small or in great degree. As a consequence of it, a little or a considerable cultural advancement was made, in accordance with the degree of ease accompanying the gathering of food and with the degree of liberality with which the environment proffered the raw materials for cultural progress.

Throughout the two western zones of the Andean area, men found the optimum of balance between leisure and en-



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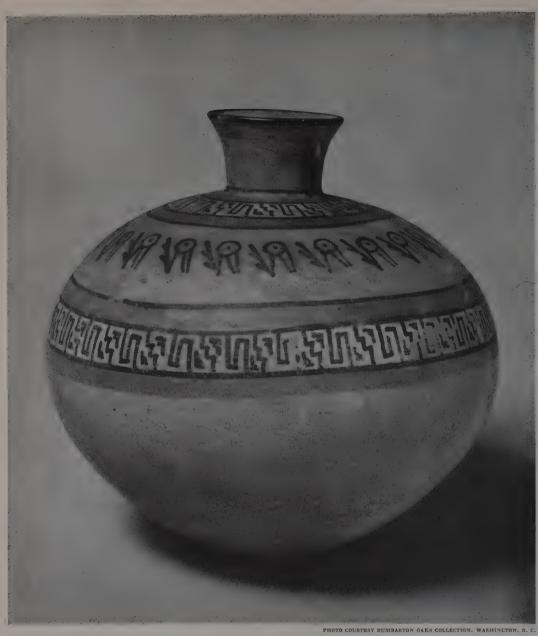


ABOVE: Early Nazca Pots. Probable dates about A. D. 300-400. Note continuation of realism along with increase of formalism. LEFT: Corner of a Large Embroidered Mantle. Early Nazca period. Probable date about A. D. 500. Note the loss of realism and the growth of formalism. Collection of Mr. John Wise



ABOVE: The Elsberg Feather-Tunic. Early Nazca Period. Note the blending of Early Nazca Style with the Tiahuanaco II Style. Probable date A. D. 600-700, below: Three Pieces of Tiahuanaco II Style Pottery. Probable date about A. D. 600-900. Note almost complete loss of realism and the growth of conventionalization. In the collection of Mr. John Wise





Late Nazca Style Pot of the Decadent Tiahuanaco Type. Probable date about A. D. 900-1000. Dumbarton Oaks Collection, Washington, D. C.

vironmental offering. Coupled with that balance there was, by felicitous chance, a more subtle and less definable factor which was present in the collective mind of the people themselves and which took the form of a special ability to make the most of that balance.1

The Introductory phase of the Andean coast is, as yet, but sparsely represented in museum collections, partly because its productions are, for us, crude and unsightly, but chiefly because they have not been dug for adequately. Still, we may be sure that the Introductory phase was there and, moreover, that it had come thither from Middle America, either by sea or else by creeping along the coast southwards.2

At the same time, in the highlands, there was an Introductory culture which we call Tiahuanaco I or Pre-Classical Tiahuanaco which is already represented in museum and private collections in Bolivia. This culture, also, must have come from the north, presumably by gradual spread overland.3

The fact that, both on the coast and in the highlands, Introductory culture totally failed to bring with it the slightest trace of even the earliest forms of the hieroglyphic and calendric systems which began to grow in Middle America some centuries before Christ, indicates roughly that the primordial migration of the Introductory culture people into the Andean area must have taken place early, let us say before 1000 B.C.

Arrived on the Andean coast, these people gradually took possession of its numerous well-watered valleys. Generation after generation their collective mind studied the environmental offering. As a result of this process there came about a century or so B.C., a sudden cultural flowering, represented in the northern half of the Peruvian coast by the civilization now called Early Chimu and in the southern half by the Early Nazca civilization.

The architecture and the arts of both were notable. On both geographical and esthetic grounds we must hold the Early Chimu civilization to be the older of the two. It was essentially realistic in its art, as shown by the designs painted and modeled upon its amazing pottery. True, there is much in the designs that is formalized; but this element is the esoteric product of highly organized statecraft and priestcraft,

RICHT: Pots of Inca Period.

Probable date about A. D.

1300–1500. The pot on the right is a typical Inca shape, the aryballus. Note purely formal decoration on both.

BELOW: Late Chimu Pot.

Probable date about A. D.

900–1100. Note revival of realism accompanied by loss of skill in sculpturing





PHOTOS COURTESY AMERICAN MUSEUM OF NATURAL HISTORY



and it does not diminish the essential realism of Early Chimu art. In point of coloring Early Chimu art was adequate, but not rich; in point of linear and of plastic design it was superb.

Early Nazca art clearly proceeded from and carried on the Early Chimu art. The two were largely contemporary, both having flourished in the first six hundred years A.D. But, although Early Nazca art began as a realistic style specially rich in coloring, it steadily marched away from realism towards formalism and conventionalization. At its peak, in the sixth century A. D., Early Nazca art presents an overwhelming array of gorgeous coloring and of subtle linear design accompanied by a notable loss of realism.<sup>4</sup>

Meanwhile, the highlands behind the coast had been seeing a continuance of the Introductory culture called Tiahuanaco I. It was a continuance marked by slow progress and by a gradual enlargement of artistic ability. The result of it was that, by about 600, the mountain folk had reached the limit of development possible within the bournes of the Introductory phase. They were then ripe for new influences from outside their own region.<sup>5</sup>

The needed stimulus came. It proceeded from the coast, but whether in warlike guise or in the form of peaceful contact between the aging Early Nazca culture and the still youthful and undeveloped highland culture we do not know. At any rate, Early Nazca art, with its rich repertory of color and its wide variety of linear design, merged with and stimulated the hitherto rudimentary Tiahuanaco I art. The latter had in it, however, sundry elements peculiar to itself, such as a pre-occupation with certain life-forms which, being integral parts of the people's religion, persisted after the fusion. Chief among these seems to have been a man-like deity of some kind.

The merging of Early Nazca art with that of Tiahuanaco I resulted in the rise of that great Andean style which we call Tiahuanaco II or Classical Tiahuanaco. It flourished from about 600 to 900. From its metropolis at Tiahuanaco, just south of Lake Titicaca, it spread in the highlands north into Ecuador, south into Argentina and Chile; and, on the coast, it spread from the Gulf of Guayaquil along the entire Peruvian seaboard. Wheresoever it spread, Tiahuanaco II art superseded all existent local styles of art. Easily recognized wherever it occurs, it is seen completely to dominate the artistic thought in every region into which it penetrated. Thus it was, in effect, the first imperial pan-Andean civilization, in esthetic matters certainly, and probably also in political and economic matters as well. For this opinion not only art but also folklore offers justification.

When, about 900, for reasons at which we can only guess, the Tiahuanaco civilization collapsed, there followed a period of renewed local independence in matters artistic. In the highlands it seems to have been a time of cultural and artistic decline: Released from, or deprived of, the dominance exerted from Tiahuanaco, the mountain folk slipped back

(Continued on page 544)



OTO COURTESY TENNESSEE VALLEY AUTHORITY

Downstream Face of Pickwick Landing Dam. At right the navigation lock; at left the power house, eventually to be made thrice its present length

### TENNESSEE VALLEY AUTHORITY

### A NEW PHASE IN ARCHITECTURE

BY F. A. GUTHEIM

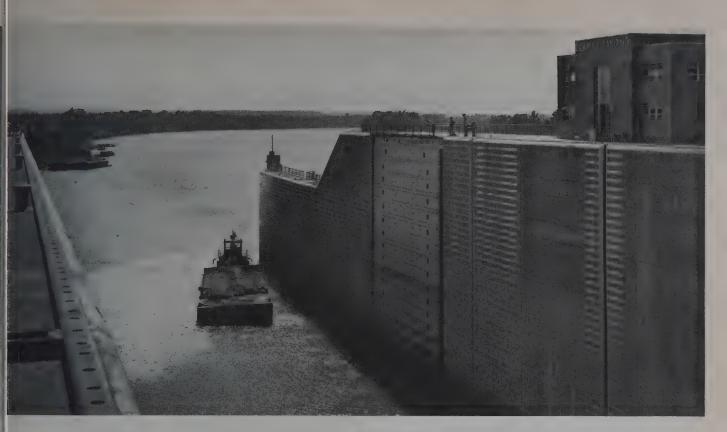
THE TENNESSEE RIVER has now become a chain of lakes, reaching from the Southern Appalachians seven hundred miles to the Ohio: eight great dams have been built by the Tennessee Valley Authority, creating a series of ninefoot, navigable channels, and holding the spring flood waters securely within the banks of great artificial reservoirs. As the heavy rains fall in the mountain headwaters, the water is held in storage reservoirs behind Norris and Hiwassee. Through the dry summers this water is released as needed to fill the river channel below; and as the water flows down, over dam after dam, whatever the season, always electrical current is being generated by its fall. At Chickamauga, Gilbertsville, Wheeler, Wilson, and Pickwick, the impounded water is directed through turbines geared to enormous electrical generators. The resulting current, unified in one great system, is distributed throughout the valley and the surrounding area.

So we have the stirring vision of a great control system in operation throughout the valley. As more water is needed at any point in the navigation system it is readily supplied from the great storage dams. As more electricity is needed at any point served by the system thousands of kilowatts may be generated and delivered by the turn of a switch. In a handful of control rooms up and down the river a few men sit, watching dials and gauges, deciding where the water and the hydro-electric current shall be sent.

Since its inception by Congress in 1933, this vast and systematic development of the hydrographic resources of an entire river system has been conceived in terms of the unity and interdependence of all natural resources in the area. No one thing has been done that has not first been examined in terms of its effect upon other activities and objectives, now and in the future. And finally, the values in terms of which decisions were made were not exclusively of an engineering, economic, and political nature. Other aspects were considered—biological, social, and even cultural and esthetic. That is why, in addition to the sense of design that distinguishes the plan, each individual part of the work acquires dignity and strength from its association with the whole. No work has been too small to deserve proportionate consideration.

NOW THAT THE WORK of harnessing the Tennessee is virtually completed, the time is ripe to review its architectural accomplishments and to consider their significance. Let us point out at once that for the purposes of this article, and indeed, for the purposes of architectural appreciation in general, nothing is to be gained by drawing any arbitrary distinctions between what is engineering and what is architecture. Here architecture and engineering are perhaps more completely integral than they have been at any time since the two professions became separated. Let us also remember that the essential problem faced by the TVA was the construction of a series of substantially identical developments. Although built in the same general region, by the same designers, and for the same purposes, there are important differences between the various dams, and an important development in design may be observed when the work is studied in its chronological sequence.

The elements in a modern dam include the dam itself, usually built of earth, concrete, or both; the reservoir behind



ABOVE: Navigation Locks, Pickwick Landing. The concrete locks are lined with steel strips to take up shock of barges. Control room is in the lock house at right. Boats in the lock are moored to the sliding bitts in the slits at right. RIGHT: Approach to Pickwick Landing navigation lock is hatched for better visibility. The concrete structure on top of the lock houses stream gauging apparatus, as composed as a piece of useful sculpture

the dam; the power house containing the turbines and generators, a control room, repair facilities, cranes, shops, and such offices, laboratories and other rooms as may be needed; the switch-yard where the current received from the generators is transformed and sent out along the high-tension cables, whose pylons may be seen marching over the hills toward distant cities; a set of locks, through which vessels are passed from one river level to another, and lock houses to accommodate the control machinery and the attendants; such roads, bridges, walks, landscape development, and the like as are necessary for ordinary circulation and access; housing, where necessary in remote places for the operating staff; and accommodation for visitors, ranging from simple parking areas and overlooks to quite elaborate provisions within the dams and power houses, and adjacent park developments where shelter, food, and the recreational opportunities of the artificial lakes behind the dams are provided. Within this general formula it is necessary to distinguish between the storage dams, Norris and Hiwassee, and the run-of-the-river dams, of which Chickamauga and Pickwick are typical. The former are located in the mountains, are used primarily for the storage of flood waters and by virtue of their height and spectacular scenic surroundings have a special dramatic quality lacking in the other dams. The navigation dams are long and low, bracketing the wide river valley, usually with a lock at one end and a power house at the other.





ABOVE: Buildings for Visitors, Pickwick Landing. One houses a refreshment stand, the other an information desk and small exhibit. On either side are terraces where visitors may sit. Note the various lighting fixtures, including those recessed into the concrete retaining wall.

RIGHT: Upstream end of navigation lock (this one at Guntersville).

Vessels tie up along this wall while awaiting signal to enter the lock

Presented with this relatively inflexible program of necessities, the conspiracy of nature and the engineers does not at first seem to provide much opportunity for "architecture," save perhaps in the antiquated sense of hanging some ornament upon the engineers' structural forms. Still, closer examination and some architectural prescience will reveal many elements that can be dealt with at once in architectural terms, and many more which can be made subject to architectural control in the interests of better proportion, composition, uniformity, the character of building materials to be used, and such items as the manner of finishing concrete, color, the lettering of signs, and the like. Much further examination is not needed to demonstrate that a clever architect is easily able to command enough elements to be able to determine the ultimate character of the work and to give it a more heightened architectural expression than would otherwise have





ABOVE: Main Lobby of Power House, Pickwick Landing. Typical details of TVA architecture are shown. Note especially the ceiling and illumination, the burlap-on-plaster walls, the aluminum doors and hardware. First door on right leads into control room; second door on right onto balcony overlooking generator hall. Below: Characteristic TVA Exhibit, Pickwick Landing. At nearly every point where visitors are admitted to TVA properties they find attractive exhibits of the kind shown here, consisting of photographs, analytical drawings, and maps







ABOVE: Power House, Chickamauga Dam, Tennessee. A little above Chattanooga, this dam is the most recently completed. Well shown here is TVA device of giving texture to large concrete areas by using undressed lumber forms with boards running in alternate directions. Interior of this building is most impressive of all TVA power houses. Perforations in the wall above top row of windows are air exhausts. LEFT: Spillway, Chickamauga Dam. The grammar of modern architecture is established by the regularity of its engineering forms. Water passing through dam is controlled by series of gates, operated by gantry crane, upper left

been the case. Still he cannot content himself with reworking the original drawings of the engineers, altering their proportions, choice of materials, color, texture, and finish; or by controlling the finish of various buildings, and even the plans of some of them. He must reach into the fundamentals of engineering design, and by logic and persuasion establish the value of his contribution in the general collective design. Only in this way can the basic elements of composition, plan, circulation become subject to architectural control.

From this it may readily be seen that the architect here is placed in a radically different situation than that for which he is trained and in which he customarily finds himself. He is not an individual in control of the work, but one member of a team. He can operate only to the extent that he can first cooperate.

Before we examine the results of this cooperation—and I might say at the beginning that in this case it seems to me highly successful—the paradox in this new situation should be disclosed and explained. In losing his traditional position of dominance one might assume that the architect can no longer be considered as the undisputed author of the work.



ABOVE: Detail of Power House, Wilson Dam, Muscle Shoals, Alabama. Representative of war-time construction (completed 1926). RIGHT: Power House Entrance, Guntersville, Alabama. Unique among TVA power houses for its use of buff brick. Clean, untroubled masses contrast oddly with earlier engineering works. BELOW: Power House, Guntersville Dam. Note texture of concrete







Control Room, Guntersville Dam. A quiet, efficient work-place, free from distractions, perfectly lighted, all noise deadened by acoustic ceiling

Yet this is not the case. What you see when you look at these vast engineering accomplishments is architecture. And it is not the accidental architecture of a rock formation, nor the naked architecture of a grain elevator: it is as calculated and as controlled a piece of construction as a temple. You know it is architecture because it is beautiful—beautiful in a way that other dams where there is merely sincere construction are not. Perhaps this point may briefly be clarified by recalling Geoffrey Scott's distinction: in the Architecture of Humanism he says, "The vivid constructive possibilities of a building, in so far as they are effectively constructive, must exist as facts . . . But in so far as they are vivid, they must exist as appearances."

When we look at the construction in the Tennessee Valley we see architecture. The job of the architect has been to make sure that the dams look as efficient as the engineers have made them. In this association it seems to me not only that the architect has gained rather than lost, but that the role he has played with such evident success ought to alter some of our prevailing arbitrary notions of the nature of architecture itself.

Henry Adams expressed the most civilized reaction to the dynamo. He supposed modern times might find unity through it as the middle ages found unity through the Virgin. Unity it has indeed provided, spiritual as well as material, and the gaudy immediate uses to which its benefits have been put should not blind us to its greater liberating possibilities in the future. As one stands in a power house, looking over the great cylindrical generator forms, it is a solemnly impressive experience. The symbolism is too apparent, its impact too urgent to be misunderstood. And this symbolism is enhanced by the ritual incident to experiencing it.

For miles off you see the dam, the flat implacable slab of its downstream face growing larger and more impressive as you approach, until finally you are overwhelmed by sheer architectonic scale. The work has the solid dignity of a pyramid. You park your car, get out and re-submit yourself to these mighty architectural forces. You approach the power house, dwarfed in size by the dam, but titanic in comparison to yourself. The huge doors swing open and you are absorbed in the cool interior. You are in a calm, quiet lobby, every detail of which reflects the strength of the complete structure. The large, heavy doors and windows, the massive ceilings, the solid and efficient terrazzo floors, the bold blues and grays are all so agreeable and so human that you are provided with an effortless means of relating yourself, your physique, your imagination, to the massive construction above.

Through a plate glass wall you see the control room: one

Generator Hall, Guntersville Dam. Operations crew, duarfed in the huge room get their orders from control room. The hung ceiling at Guntersville was an experimental development. More recent power houses have returned to exposed construction







LEFT: Generator Hall, Guntersville Dam. The extremely finished appearance of this room results from the extensive use of green structural tile and the glass brick window strips at the top of the room. On the left an open balcony provides access to offices. ABOVE: Generator Hall, Wilson Dam. Contrast with the slick, modern generator housings and oil pressure tanks at the left

or two men seated at desks, and beyond them scores of dials and gauges mounted in black plastic and metal cabinets. The vaulted acoustic ceiling is covered with perforated fibre blocks, and the walls are painted an efficient gray. The illumination is unobtrusive, yet perfect. Occasionally a light flashes on the control board, the phone rings, or an adjustment is made; but the impression is one of totally automatic operation.

You turn to enter the generator hall. Again massive doors give scale to the enormous chamber you enter. The room is tall and long, for the lower part may be under the high waters at certain seasons; and the light pours in through the banks of sparkling glass-brick windows near the ceiling. The exposed steel trusses strengthen the interior and the distances between them measure the length of the hall. Above the floor rise the cylindrical generator housings beneath which you sense the powerful operations of the dynamos. It is an hypnotic experience. Your ears are filled with the insistent hum of the powerful generators, your eyes are filled with the impression of strong mechanical and structural forms, you touch the solid concrete, the tile, the aluminum hand-rail, you sniff the faint odor of ever-present oil-the total impression is complete, everything contributes to the one major effect. You are in the presence of the most impressive symbol of ultimate force the age has produced. You rise above the initial impact of scale and strength and begin to look around. You are not conscious of architecture; only of architectural effect. It is an effort to note the roof construction, the concrete and green tile walls, the heavy and complicated traveling crane and the three copper bands along the wall from which it receives its power, the green painted generator housings and oil compression tanks, the well-proportioned window openings, the trim access stairs with aluminum handrails, the dark red block floors, the smartly designed light fixtures, the adroit balconies and open corridors. The sense of the whole, the unity of design is always the important thing. Your attention is not distracted by architectural irrelevancies. If you think of the room at all, you think of it merely as an appropriate room to house these mighty and impersonal generators.

As you leave you note again the details: the ingenious drinking fountains of Tennessee marble, the objective photographic exhibits in the lobby, the sturdy furniture. You leave the power house. Ahead is the magnificent natural view down stream, the thickly wooded hills rising above the trickle of water in the river, the rugged, still untamed nature. To one side is the switch-yard, humming and crackling in its inexplicable aluminum spider web of wires, transformers and



ABOVE: Main Entrance Lobby, Wheeler Dam Power House. The ceiling is unusually elaborate. BELOW: Exit from Wheeler Dam Reception Room. RIGHT: Balcony, Guntersville Power House. Right hand wall opens along whole length of generator hall







fences, and from it begin the long, rhythmical swoops of cable marching off through farm and forest.

At one side of the dam, either below in view of the majestic concrete face, or above by the wood-fringed lake, the TVA has provided shelters for visitors. These contain toilets, drinking fountains, a refreshment stand, and an exhibition of photographs. Without exception they are charming buildings with shaded porches or terraces and well chosen furniture, the best of it from Thonet. In addition to these permanent structures, temporary visitors' outlooks have been built of wood and homosote where dams are under construction. In the permanent visitors' buildings there is an opportunity for easy architectural expression to provide a fitting surrounding for relaxation. The latest, at Hiwassee, is certainly the best and most interesting of this series of jeux d'esprit.

As one walks or drives about the dams the stong impression of detail is renewed. Everything seems to be marked by a sound choice of materials, by good design, and good craftsmanship. Careful judgment has been shown in the design of the approach roads, and the hardy, indigenous landscape has been mutilated as little as possible.

LEFT: Visitors' Building, Guntersville Dam, rises from rip-rap bank protection, has easy access to parking area. Lavatory entrances are on side opposite porch. BELOW: Looking out from semi-circular porch of same building to river traffic and dam





Visitors' Observation Point and Building, Hiwassee Dam, North Carolina. Well situated in a little grove of trees, with magnificent views of lake and dam, this building is similar to its counterparts at Guntersville and other TVA dams. Concrete block construction, painted cream

In any general review of the architecture of TVA some mention should also be made of the fact that many other types of buildings have been constructed in the course of its comprehensive operations. Yet I cannot see that in its housing for construction workers very much of major importance has resulted, and the permanent homes for the operating staffs are distinctly lacking in architectural interest. Save in a few instances, not much of consequence can be said for the highway bridges, most of which are not conspicuously better in design than those being produced by the best state highway engineering departments. Here and there, among the hundreds of details in this general program, something of unusual interest emerges: the design of a refrigerator barge, for example, or the arrangement of a small post office. The rest is the bread-and-butter grammar of good modern building.

HERE, IN THE TENNESSEE VALLEY, a new kind of architecture is in action: the architecture of public relations. It is also architecture in the public interest. From the conception of the scheme to its final execution you feel that each decision has been made in the light of the fact that the public would come, look, and judge by what it saw. And you feel something deeper—a conviction that here has been an opportunity for a magnificent demonstration of what a public architecture can be, a practical, sincere, and beautiful workarday architecture. The excellence of the architecture in-

volved in this demonstration is not a matter of style, and still less of detail. It is a matter of principle, and of thoughtful expression. The details themselves are often objectionable: they are often too rich, too fussy, too obviously studied. But such objections are swallowed up in the total composition and the final architectural effect. There is room in a scheme of this magnitude for a great many minor indiscretions without seriously altering the basic effect.

If one seems to quibble a little over the details of the architecture of TVA it is only because the work itself is so overwhelmingly important, and because one hopes its influence will be widely felt, not as a simple emulation of a few memorable details-which may be good or bad-but because of the essential greatness of the work itself. For here is a sequence of buildings all too rare in our architectural history, which stand as an affirmation and a challenge to the most powerful architectural dogmas of our time; which may influence public buildings mightily as they have not been influenced since the dawn of architecture as a modern profession; and which may exercise a powerful moral influence in architecture far beyond the confines of the Tennessee Valley or the immediate architectural dilemmas of modern government. That this promise may be confirmed and realized is something for which all may ardently hope; yet if it is not first understood, like all architectural "influences", it merely contributes to our current eclecticism.



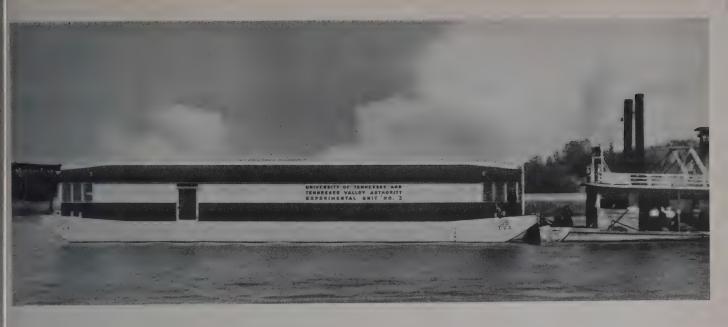
ABOVE: Park Area, Hiwassee Dam, overlooking downstream face and view down river. Cast concrete benches in curves follow line of curb



ABOVE: Boat Harbor, Norris Dam. Boat houses, piers, lockers, and parking area are combined into one architectural composition. BELOW: Visitors' Building, Hiwassee Dam. Steel supports for porch roof provide greater visibility than the brick piers of Guntersville visitors' building. The porch roof forms a complete circle, intersected by rectangular form of service unit. Building houses usual conveniences and an exhibit



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ABOVE: Experimental Refrigerator Barge, developed by TVA and the University of Tennessee to facilitate shipping of fast-frozen berries and other produce. Enhancement of engineering forms applies to small projects as well as large. Below: Hiwassee Dam is the tallest spillway dam in the world and TVA's most recently completed storage dam. Note provision for pedestrian observation points, design of gantry cranes





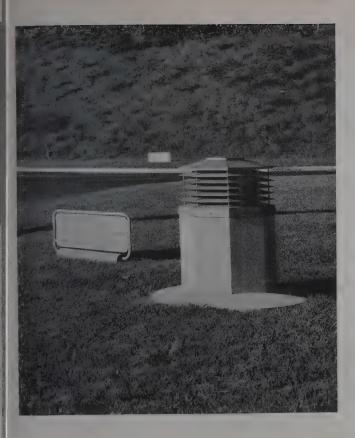






ABOVE: Three Types of Gantry Crane. Evolution of machine design: First crane at Wheeler (left) is "raw engineering," heavy, brutal, unrefined. The second crane (center) at Pickwick shows "industrial design," structure and machinery somewhat rationalized and encased in smart overcoat. Third crane (right) at Hiwassee shows refined machine form, overcoat discarded, asserting its structural elegance and delicacy. LEFT: Temporary Visitors' Building, Kentucky Dam. Open side faces two miles of construction. Rear wall contains photo-transparencies; side walls are devoted to other exhibits. Low black benches are notable detail. BELOW: Steel Foot Bridge. Many rail and highway bridges have been designed and constructed by TVA. This footbridge took first prize in a Steel Institute national contest





In the Tennessee Valley we have shown (at a time when many had come to doubt it) that a public architecture can be a great architecture. We have demonstrated that the functionalist dogma is not broad enough, wide enough, or deep enough to support the esthetic even of functional buildings. We have proved that the mightiest structures of a power age can have the eternal quality of human scale. We have found new reason to believe that modern architecture only starts with the design of buildings; that it goes on to larger works of planning and construction, and is comprehensive enough to include the smallest details; that a confident and expanding movement will find new and more significant uses for creative spirits instead of choking them off into specialized ruts. These are demonstrations which I believe transcend and exceed anything the Tennessee Valley Authority understands it has attempted or claims that it has achieved: they hold the seed of a future brighter than even electricity has promised.

EDITOR'S NOTE: Due to the emergency, TVA power houses and certain other parts of the structures are closed to the public. Much of interest, however, can still be seen.

ABOVE: Park Lamp, Norris Dam. Provides non-glare light and obviates high lamp posts. Pipe-framed sign is also notable detail. BELOW: Two TVA Drinking Fountains. Typical indoor fountain (left) of Tennessee marble and tile. Outdoor memorial (right) at Norris Dam







LUCA CAMBIASO (1527-1585): CUBISTIC STUDY OF MEN WRESTLING OR FIGHTING. COL-LECTION UFFIZI, FLORENCE

## ON TEACHING THE EXPERIENCE OF ART

BY LOIS WILCOX

FROM ANY POINT of view the history of art is fascinating. Save for the making of rough stone implements, painting is the oldest activity of man known to us. It is deeply moving, standing in the caves of Altamira, to be touched by the force of a mind that left its imprint upon the rocks perhaps twenty-five thousand years ago. So astonishing is the merit of some of this work that one is tempted to think that even then there was conscious ap-

praisement, for here there is great sophistication in the powerful and suggestive line in contrast to a neighboring work of childlike simplicity. One feels in the finer examples a great joy in the command of form.

The pyramids of Egypt were older to Caesar than Caesar is to us, yet there is no more charming record of daily life than that left in their shadow. This living narrative may be read and wondered at by any observer, but to the trained eye there is much more. The language of art does not lie. In the character of line, form, space, color, whether it wills

or not, a nation leaves a record of its heart and mind, of its integrity, its tenderness, its power, cruelty, degeneracy. Here is the unequivocal voice of the spirit. This is the greater wonder. Most rewarding of all is the sensation of art, irrespective of history, the sensation that cannot be translated into words though one gropes for definition. It brings us a sense of greater vitality and expansion into the infinite harmonies. This sensation is the reaction to the plastic language, and even the professional painter knows that the perception of esthetic values is a thing of growth. If merely looking at works of art awakened the perceptions, the uniformed guards in museums would be our most profound critics. Doubtless some people are innately sensitive to the qualities of art, but the average person needs to be awakened and set growing. The student must become "eye-minded," not merely "book-minded." The teacher's eloquence and the partial record of the photograph are poor tools for the task of developing the seeing eye. Even the best color reproduction lacks the very sensitivity that is part of the original's value. The problem of how to develop appreciation is especially serious for schools and colleges that do not pretend to train professional painters and sculptors. Their students will represent the culture of our land. Is this culture, among other things, to be a glib knowledge of what others have felt and written about art, or may it not be the true enrichment through personal experience?

Properly directed, the first steps in understanding can be taken by attempting to draw, paint, model, and carve. Whether the student has talent or not is beside the point, for it is the result on the mind not the product that matters. Much of the old art-school training did not lead to understanding of the world's art. When mere versimilitude was the aim, the language of line, form, space, and color was hardly considered. Art-school training has changed vastly in the last few years, but knowledge of the great traditions is seldom included in professional schools. Most of the original minds in the history of art have been nourished on the rich food of an established tradition. From this they have gained strength to grow. Now we lack this source of good roots.

The teacher who faces the problem of making art a vivid reality must be equipped with as much direct knowledge of originals of all times as possible, must be possessed of broad sympathies and understanding, must be a competent painter, and must have enough imagination to be able to create exercises that aim to awaken sensitivity to esthetic values. Limitations the honest teacher will feel, but the experience of such an undertaking will be of value to the teacher as well as to the students.

Six years ago Sweet Briar College began this experiment in a new kind of teaching with a class of twenty-six girls. Many had not grasped the fact that in electing the comprehensive course in the history of art they would be required to spend some time each week in the studio. After the first meeting in the lecture-room there was some remonstrance from those who said they had never tried to draw even as children. They were asked to be "good sports" and try the experiment, and were assured they would be marked only for faithful hours of effort. Now the class has grown so that it has to be limited for lack of working space, and additional years of "studio practice" are offered. One hears such remarks as, "The moment I began to draw in this way I began to look at the world and pictures differently." A student was overheard advising a friend, "Don't miss the art practice. It is wonderful. It does something to you." This is our reward. The girls become aware of faculties many did not know they possessed; they are aware of an awakening, of growth and enjoyment.

The joy in the prehistoric painting of the Altamira type lies in the power of the free, expressive line to make us feel the vital masses of the beasts. We note that reality is here not by copying, but by the synthesis of knowledge; knowledge of the forms and of their rhythmic coordination. We grow in appreciation of these qualities by attempting to





Head of Christ from the Gero Cross. Cologne Cathedral. About 970. ". . . Gains new significance as an expressive symbol. . ."

draw in this spirit. Casts have to provide the studio models though the girls are urged to sketch at the riding ring, at the farm, from campus pets, and from memory. The copying point of view is taboo. The line must be alive and attempt to suggest the movement of the masses. Very crude drawings are sometimes very expressive. Later the girls will take turns posing for each other.

The type of prehistoric painting found in eastern Spain, the rhythmic, unrealistic huntsmen, suggests exercises with the brush. Expressive motion is stressed, and the rhythm that passes through the group. We do not copy the ancient work. The student must express the reality of her own visual image. Often there is great enthusiasm for the dance which provides interesting material. Expressive distortion is encouraged as being in tune with the character of the huntsmen, and incidentally, with much contemporary work. On the walls of the studio reproductions illustrate the unity and variety of man's expression in line.

Neolithic design suggests exercises in filling spaces with simple geometric forms. Some of these are done freely, others with a strict mathematical basis. Photographs of contemporary rugs exhibited at the Metropolitan Museum show current development of this same instinct, and provide a stepping-stone to some modern painting.

Paralleling the study of Egyptian art, we attempt designs based on our own daily life, with stylized forms and textures, and clean outline. Groups have worked together on mural cartoons in this manner. To study Egyptian sculpture casts again are used, but the approach is very different

from the usual cast drawing, or from the linear idea we began with. The problem is to recreate in drawing the reality of the architectural masses. We try to visualize and draw the block as the sculptor first began to shape it; we learn to appreciate the full, sure turning of the great planes and their wonderful organization. From living models we extract the essential volumes. We are beginning to think in three dimensions. Because of crowded quarters the experience of sculpture by modeling and carving has to be limited to the class whose lectures are on the history of sculpture.

When the students of the comprehensive course begin the study of Greek art they are already aware of values other than mere representational naturalism, the only standard most of them begin with. From photographs and casts they analyze classical composition, discovering its coordination about an axis, its relation to the frame and the picture plane. In this spirit those who can, make compositions of their own, sometimes merely drawing a geometric solid twisted in the classic rhythm. Or they may trace a metope or stele and color the background to make clear the value of the pattern. Now they learn something of the structure of the body; and its poise about an axis suggests the reason for the Greek design sense, that seems to grow from a sense of lyric music and the dance. But our young women have become conscious of order as a factor in art, and the degenerate nature of Hellenistic naturalism they recognize without being told. We find now the beginnings of illusionism that will be followed in its long journey to the French Impressionists. We have noted the change of feeling for form from the archaic to the end of the classic world, and we will note the same cycle again and wonder at art's prophecies.

We experiment with the plastic values of color when we come to the Byzantine period. Inventing free designs in color we see how some tones project and some recede, how some appear solid and others vague, and we note the influence of one color on another.

How excitingly varied the history of art is! The ideal of the beautiful body is denounced by the church, but it gains new significance as an expressive symbol. The studio is buried in wild drawings depicting fear, joy, grief. We begin to look at Rouault with new eyes.

The noble ensemble of Byzantine decoration can only be talked about, not at all grasped from photographs. But their teacher hopes that some day these girls will be an influence, will be patrons that demand of mural painters more than a series of panel pictures. For it was not until Giotto and Duccio that panel pictures predominated.

The work of these men and many, many others makes clear that propaganda is not a deterrent to great design, as their pictures were propaganda for the Church. We do compositions in tempera with the emphasis on the pattern shape in the Gothic manner, and sometimes we attempt a theme of social significance such as the evils of child labor, etc. For the student with no facility merely tracing a reproduction with indications of the lights and darks makes for closer observation. While for all of them sketched analyses become more useful as European painting is followed. That the analytical point of view was alive in the period of the (Continued on page 548)

## NEWS AND COMMENT BY JANE WATSON

Thomas C. Parker Comes to the Federation

IN THIS ISSUE we are happy to announce the appointment of Thomas C. Parker, former Deputy Director of the WPA Art Program, as Director of The American Federation of Arts. The news was released to the press on August 19 by Mr. Bliss, President, in behalf of the Trustees. The appointment brings to the Federation a man particularly well fitted by experience and predilection to carry forward the work of an organization which has for over thirty years been devoted to the support and development of art throughout America.

Mr. Parker resigned his post with the government on August 15 in order to accept his new appointment. He had been with the WPA Art Program since its inception in 1935, when he was named assistant to Holger Cahill, Director. He became Deputy Director two years ago, and was in active charge for many months last year when Mr. Cahill took leave of absence to direct the contemporary art exhibition at the New York World's Fair. In his successful promotion of the Community Art Center Program of the WPA Mr. Parker has had a major part in a movement which promises to be of fundamental and far-reaching importance to the development of the arts in relation to American life. Under this program eighty-two community art centers and galleries have been established and are operating under joint local and WPA auspices in twenty-two states.



Thomas C. Parker, new Director of the Federation

Mr. Parker, who is thirty-five years old, is a native of Virginia. He attended the University of Virginia. Before assuming his duties in Washington with the WPA Art Program he was for three years Director of the Richmond Academy of Arts; here, as in his later enterprises, he worked to make his organization an integral part of the life of the community. Mr. Parker also was on the Governor's advisory committee, which planned the establishment of the Virginia Museum of Fine Arts.

Louis B. Houff, Jr., who had been associated with the Federation since 1931, resigned as Manager this summer in order to become President of Famous Virginia Foods, Inc., at Lynchburg, Virginia. In accepting Mr. Houff's resignation the Board of Trustees passed the following resolution:

"WHEREAS, Louis B. Houff, Jr., has been associated with The American Federation of Arts for a period of nearly ten years, during which time he has rendered services of outstanding merit; and

"WHEREAS, Mr. Houff has with reluctance submitted his resignation to the Board of Trustees in order to take advantage of a special personal opportunity; now therefore be it

"RESOLVED, That the Board of Trustees of The American Federation of Arts express their deep regret at Mr. Houff's leaving the Federation, their admiration for his outstanding and loyal services, and their best wishes for success in his new venture."

#### Nothing to do with Music

FOR A PRESIDENT of the American Federation of Musicians to accomplish unionization of the Boston Symphony Orchestra would be a feat comparable to harmonizing Herbert Hoover with the present administration. Founded in 1881, with the backing of a generous "angel," Henry L. Higginson, the Boston Symphony has to this day held out against all assaults of the unions. Paying its musicians the highest average annual wage with a relatively low weekly average for a long season, earning a higher proportion of its budget than any other major orchestra, it remains the only nonunion orchestra of consequence in the country. It has withstood such disruptions as the strike in 1919, when at the time Pierre Monteux was conductor, a group seceded for the right to join the union. It has been barred from the air, through the power of the unions, and now is to be kept off the phonograph disks. But still the Boston Symphony, now and for a number of years under the direction of Serge Koussevitzky, has thrived. The fight, which incidentally has nothing to do with music, goes on. In the meantime the major loss is to that portion of the musical public which cannot attend Boston Symphony concerts and is deprived of hearing by other means one of the finest orchestras that we have.

James C. Petrillo assumed the presidency of the American Federation of Musicians last June, upon retirement of Joseph N. Weber because of ill health. Two months later he announced what the New York *Times* carefully tagged as



William Earl Singer: Storm Over Lemont. Oil. Seen in Ten Chicago Painters Show, Art Institute, to October 20

two separate disputes. Dispute No. 1 involved prevention of the Boston Symphony Orchestra from performing with any union musicians, or on phonograph records or over the radio. Dispute No. 2 involved the same prohibitions for Jascha Heifetz, José Iturbi, Efrem Zimbalist, and other virtuosi, unnamed. In the latter connection the American Guild of Musical Artists has protested what it considers an infringement of its rights over instrumentalists. Mr. Petrillo's claim is that the American Federation of Musicians' charter with the A. F. of L. gives him clear title to anyone who plays a musical instrument. His tone is possessive, to put it mildly: "They went along and took the instrumentalists. They took the piano players and then they took orchestras. They stole my people and I'm going to get them. They're musicians and they belong to me." In one sentence, he smites the Boston Symphony and Messrs. Heifetz, Iturbi, and Zimbalist. "They're through," he said. Again, of course, no reference to music.

Thus clumsily this leader wields his big stick in a world of batons and bow-strings, a menace to his own cause.

The American Federation of Musicians, an affiliate of the A. F. of L., is a national craft union which embraces professional musicians of all kinds. Symphony orchestra players represent only a very small proportion of the total membership. Local units have authority over local rates of pay, conditions of employment, and the importation of union players from other regions. Individual contracts are based on a trade agreement with the employing organization and the individual players.

The need for a stabilizing force to guarantee proper working conditions for musicians is too obvious to question. But in the study previously mentioned in this section, America's Symphony Orchestras and How They Are Supported (prepared under a Carnegie Grant and published by W. W. Norton), the authors point out that present terms of union agreements are apt to interfere with the flexibility of an orchestra's program, and thus hamper its development. Here we take the liberty of quoting a few paragraphs which may serve to shed some light on the problems involved: "Union agreements at the present time are designed to maintain the maximum rate of service. [A service is the basic unit of the union trade agreement and player contracts.] It represents a unit of specified hours applicable to either concerts or rehearsals. The union agreement fixes the cost per service by specifying the number of services that can be demanded either for each week or for the season as a whole. A few agreements go so far as to specify the ratio of concerts to rehearsals within a given week. This policy is in keeping with traditional union economic theory, usually emphasizing rates of pay per unit more than total income,



William Givler: Island in the Columbia. Lithograph. Included in AFA Traveling Show selected by Olin Dows

and is given force by the perfectly justifiable fear of the unions that reductions in the weekly minimum will not be accompanied by guarantee of reasonably stable lengthened employment and consequent improved total income. The effect of the union agreement thus is to make impossible increased number of concerts without a proportionate increase in costs.

"Other than actual reduction in player salaries, which in view of present levels is impractical, the only modifications of the union agreement that would make possible an increasing number of concerts at a decreased unit cost are: (1) to increase the number of available services while retaining the present minimum rate of pay and length of season,

and (2) to decrease the weekly minimum salary without curtailing the number of services per week, but to lengthen the season to a point where players will receive a higher annual wage. Since, in most cases, the number of concerts and rehearsals per week could not be appreciably increased without undue physical demands on the personnel and consequent impairment of the quality of the performance, the first alternative is impractical.

"The practicality of the second alternative depends upon the possibility of selling the increased number of concerts. Answer to this question depends upon how fully orchestras have been merchandised in the past and the extent to which the potential concert audience has been reached. Undoubt-(Continued on page 541)



Kenneth Callahan: An Oregon Landscape. Oil. From artist's recent oneman show at the San Francisco Museum of Art



Alcove in the Cuarto-Centennial Southwestern Artists Exhibition, Albuquerque. The wood carving is "Hairdress" by Joseph R. Taylor. The pictures are, from left to right: "The Horse Lot" by Warren Hunter (Texas), "Barber Shop" by James Morris (New Mexico), "Italian Shepherd" by Edmund Kinzinger (Texas), "Chicken Yard" by Genevieve Filson (Texas), "Winter Creek" by Howard Cook (New Mexico), "Summer Bouquet" by Rebecca James (New Mexico), "40 Miles to Tucson" by Richard Sartomme (Arizona), "Flowers" by Georgia M. Dee Dosso (New Mexico), "Indian Mother and Child" by Dorothea Stevenson (Oklahoma), and "Father's Equipment" by Pedro Cervantes

## NOTES FROM A TRAVEL DIARY

San Francisco

In the emergency of 1933-34 a group of artists went to work under the old PWAP to decorate the walls of the Coit Tower on Telegraph Hill. Haste was required and collaboration was untried. The results are esthetically spotty. But that project seems to have been the start of something. When Aquatic Park is finally completed it will be a better gauge of the esthetic potentiality of collaborative design. Here the surrounding circumstances have been unfortunate; local politics and awkward administration by the state WPA have bedevilled and delayed it. But when Beniamino Bufano's black granite sculptures are all finished and in place, when Sargent Johnson's handsome tile wall in the porch is completed it will be something to see. Already Timothy Pflueger's fine modern building and Hilaire Hiler's spirited abstract murals are almost audibly demanding that the job be carried through.

Though still far from perfection, the collaborative idea has been carried far enough here to make it apparent that in time it should improve the artist's economic situation, also improve the standards of craftsmanship and design. It points toward a more rewarding function for the creative worker.

Artists in most other places have been groping toward a workable method of group production in which the talents of the individual are put to suitable use. Here on several projects they have made good progress. At the same time, inevitably, they have experimented with mediums suitable to group undertakings. Besides tempera and fresco, they

have explored the possibilities of mosaic, marble inlay, terrazzo, decorative tile work, and even sculpture as mediums in which several designers and craftsmen can collaborate. Several group projects employing a variety of skills have been successfully completed under the WPA Federal Art Project. When surrounding conditions have been right remarkable results have followed. Making these conditions right is part of the problem. For this preoccupation with group action is not a little arty matter; painters, sculptors, architects, designers, planners, craftsmen are all concerned. And so is the consumer whether public or private.

Decorations in many other buildings around San Francisco attest that artists of the ability of Ralph Stackpole, Helen Forbes, Dorothy Puccinelli, Esther, Margaret, and Helen Bruton, Marian Simpson, to mention a few, can join forces on occasion to the benefit of all. The work they do in simple or complex collaboration compares quite favorably with their one-man studio productions.

And there is the Telesis group which brings together the gifts of thirty-five young architects, planners, and designers. I saw members of the group at work building their "Space for Living" exhibit for the San Francisco Museum of Art. They call themselves an "environmental research group" and this exhibit is only a part of their program. Obviously a good deal of research had gone into its making, not only on environment, but on the uses of materials in devising such a show. It has the necessary formal quality and the style to reach the segment of the population they want to

(Continued on page 510)



This would not have been provided the line, econwithout efficiency all along the line, economies resulting from centralized research and manufacture, and a sincere desire to and manufacture and a sincere desire to serve the best interests of the public.

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interest in the need for environmental planning. The amount of skill and hard work the members of Telesis were able to pool in this undertaking without apparent conflict and with no would-be prima-donnas is amazing.

Perhaps the training of architects, planners, and designers is tougher and more thorough than the training of plastic and graphic artists. At any rate, it seems to make for effective collaboration. If group production is to be the order of the new day, art schools and art departments are due for some drastic overhauling.

Nerves are pretty taut here. The known hyper-activity of the Nazi Consulate and of some (but which?) non-diplomatic sympathizers, suspected currents of Axis feeling among certain elements of the Italianate population, and general uncertainty about defense are making people jumpy. Although artists are not immune, of course, they are able to function. In respect to the development of techniques of collaboration they are leading the country.

#### Los Angeles

I suppose it was another startled visitor from the East who called Los Angeles an "unending succession of suburbs." In five days I won't have time to verify Arthur Millier's assertion that a new kind of urban life has developed here. I guess it had to. These five days will show me about as many people and things as I could see on two fast days in any other city. As far as I can tell the new kind of life has not sufficiently changed things to support the worthwhile artists who live here. The only geographical influence I perceive has to do with the intense illumination. It does exist and there is nothing bizarre about painting it.

When he took me out to Claremont, Millard Sheets made me think that the problems of art education though knotty are on their way to solution. Sheets has some far-reaching plans which he outlined but doesn't want publicized yet. They grow out of his work at Claremont where he is building up a dynamic art department. He has the right approach when he insists that the requirements must be made exacting, the work must make hard demands on the students. Thorough understanding of several techniques, expressive and functional, have to be learned. There is no room for dead wood; those with talent and guts can get really adequate training either to do creative work (with crafts to fall back on) or to teach. Sheets is much interested in turning out adequately trained art teachers—trained in the arts and not in the wiles of pedagogy. He wants to send such young teachers into the schools and colleges where they can tighten standards, and bring art teaching into a position of leadership. Millard Sheets has good ideas and his inexhaustible energy is putting them across. . . .

#### Albuquerque

Group achievement is necessarily a product of urban living, and in San Francisco I felt that the most striking developments were the cooperative ones. But to come down to New



Kenneth M. Adams: Portrait of Donald L. Gilpin. Oil, 1940

Mexico is to be reminded that the ultimate creative unit, even in the group, is the individual.

In Santa Fe and Taos everyone paints the country around him; the mountains, canyons, sparkling atmosphere, and incredible colors make it real artists' country. But the results on canvas and paper run the gamut of multifarious vision and expression. The reassuring conclusion to my studio and gallery visits was that there is still plenty of spontaneity and serious effort in a section that has come to bear the unfortunate designation "artists' colony."

One of the healthy signs is the amount of experimentation in technical processes that is going on. Cady Wells is using water color pigment straight from the tube. Ward Lockwood is experimenting with glazes in various media.

In Albuquerque the excellent showing of work by southwestern artists assembled by Vernon Hunter for the Cuarto-Centennial Celebration gave me a good chance to discover in these pictures from seven states a good progressive average of accomplishment. Most of the above-average works were by men with national reputations. But some men whose names I had barely heard were also represented in the smaller category. It was not surprising to see fine performances by Ward Lockwood, Kenneth Adams, B. J. O. Nordfeldt, Henriette Wyeth, Andrew Dasburg, Howard Cook, and David Fredenthal, but for me it was a new experience to see enjoyable canvases by Mill Everingham, Hayes Lyon. Otis Dozier, Edward Chavez, Everett Spruce, John O'Neil, and Eugene Trentham.—F. A. W. JR.

#### NEWS AND COMMENT

(Continued from page 537)

edly a number of orchestras have a long way to go in selling out their present seasons before they could consider lengthening schedules. This holds true whether or not the orchestra now has both summer and winter seasons. In a good many cases this would require considerable experimentation and additional financing during the experimental period. The experience of the Boston Symphony Orchestra in lengthening its season and in adapting the type of concerts to the varying demands of the public is outstanding. The superb "merchandising" of the regular symphony season, the ten weeks of "Pop" concerts, the Esplanade and the Berkshire series over a period of time have enabled this organization to pay the highest average annual wage with a relatively low weekly average for a long season, to produce its concerts at a lower than average cost per concert, and to earn a higher proportion of its budget than any major orchestra. But it should be noted that this accomplishment has been largely facilitated by the absence in Boston of the inflexibility imposed by the usual union agreement."

#### Mr. La Farge's Fears for Fresco

IN INTRODUCING HIS technical notes on fresco painting, recently published by Liturgical Arts Magazine (Vol. 8, Nos. 3 and 4), Tom La Farge sounds a gloomy note concerning the physical welfare of frescoes executed in or near our modern cities. In support of his pessimism Mr. La Farge states that practically all the true frescoes painted during the last hundred years have rapidly perished, that none have remained unimpaired for over thirty years, and most have had shorter lives. "Painstaking research," he says, "and the pioneering of a handful of specialists have been of no avail against the ravages of polluted air in England and America." Pollution to which he has particular reference is due to the emanation of sulphur dioxide from coal combustion. No one who has lived in Manhattan will bat an eye at his assertion that during a "normal day" over two thousand tons of sulphur dioxide are released over the metropolis.

Mr. La Farge finds it remarkable that "no effort in America has profoundly benefited"from the mistakes of the past. He claims that the present revival in true fresco is based on the same principles which formerly have led to disaster. The stated purpose of his articles, which should be of special interest to artists using the medium, is two-fold: to encourage the use of fresco by outlining existing knowledge, disregarded or unknown, calculated to rectify its serious defects; and on the other hand, to discourage its indiscriminate use by exposing abuses committed by what he terms "unscrupulous enthusiasts whose misguided efforts have more than once brought this medium into disrepute."

Mr. La Farge is part of a tradition and a system, neither of which he is inclined to treat lightly. He represents the



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third generation of his family to carry on church decoration in this country. His grandfather was John La Farge; his father, Bancel La Farge. Born in Paris in 1904, he lived abroad until 1915. Subsequently he studied under Eugene Savage at Yale. But his principal training has been through apprenticeship, a system from which we in this country have of late been too inclined to depart. In this manner he was schooled in the techniques of fresco, stained glass decoration, and mosaic. In collaboration with his father he executed frescoes for St. Paul Seminary, St. Paul, Minnesota; stained glass windows for St. Paul Cathedral. On his own he has done frescoes for the lobby in the pediatric department of New York Hospital; stained glass windows for St. Andrew's Church at Southampton, Long Island; mural panels (oil on canvas) for the New London, Connecticut, Post Office, a Section of Fine Arts Commission. His most recent work is a series of frescoes for the Chapel of St. Francis, St. Matthew's Church, Washington, D. C.

#### Paint Standards Set for Acceptance

ON AUGUST 16 the National Bureau of Standards sent out for written acceptance by producers, distributors, and users a recommended commercial standard for artists' oil paints. In final form, it represented the work of a special committee which was appointed to carry out recommendations of a general meeting held in New York in February, reported in this section in the March issue.

It will be recalled that the purposes of the commercial standard are to serve as a guide to artists in the purchase of paints of satisfactory color, working quality, and durability; to eliminate confusion in nomenclature; to provide a basis for certification of quality.

For information write to the Paint Testing and Research Laboratory, Massachusetts WPA Art Project, 881 Commonwealth Avenue, Boston; to Rutherford J. Gettens, Chairman of the Standing Committee, Fogg Art Museum, Cambridge, Mass., or to F. W. Reynolds, National Bureau of Standards, Department of Commerce, Washington, D. C.

#### Bought and Paid For

THE ITALIANS may want the Mona Lisa back, but they can hardly claim, as has persistently been reported in the newspapers, that it was "stolen." For it is a matter of record that the Mona Lisa was bought and paid for by King Francis I of France, patron and friend of Leonardo.

It was in France, it will be recalled, that the artist spent his last days. He died at Cloux, near Amboise, in his seventyfifth year; but not apparently, as Vasari would have it, "in the arms of the monarch," for according to the journal of Francis I, the king and his court were at Saint Germain, near Paris, at the time.

#### Government Competitions

FOUR NATIONAL COMPETITIONS, two of timely significance, two unique in character, are announced in the current issue of the bulletin of the Section of Fine Arts. Also announced is a competition for murals in the Los Angeles, California, Terminal Annex, open to western artists only.

For the War Department Building in Washington, the Section invites competition for (a) a mural 50' wide by 12' high for the west wall of the entrance lobby, and (b) two sculpture groups and one relief over the main entrance on the east façade. The mural shall be executed in true fresco, fresco secco, or tempera; the designs to be submitted in any technic closely approximating fresco in appearance. The jury consists of Boardman Robinson, Mitchell Siporin, Gifford Beal, painters; Gilbert S. Underwood and William D. Foster, architects of the building. Designs must be submitted to the Section on or before April 1, 1941. The sum of \$12,000 will be paid, to cover all costs of design and execution. Subject matter is not stipulated; but it is clearly indicated that vital contemporary treatment of a theme suitable to the building is desired. For the sculpture competition for the same building, sculptors may submit models for either the two sculptures or the relief separately, or for both. Last day for entries is May 1, 1941. Models must be in the scale of one inch equals one foot. The jury consists of William Zorach, Edgar Miller, Carl Milles, sculptors; and the architects. Subject matter is not specified, except that it must be in spirit and character with the functions and design of the building. The amount of \$24,000 will be paid for models of each of the groups, \$15,000 for the relief, to cover all costs of designing, execution and delivery of preliminary models, working scale models and full size models. It shall be determined later whether carving of the sculptures shall be done by the winning sculptors themselves, or by assistants under their supervision; in the former case additional funds will be added to cover the cost.

The sum of \$6,000 has been allocated for purchase of 200 water colors for decoration of the Carville, Louisiana, Marine Hospital; through the generosity of the Carnegie Corporation an additional \$3,000 will be spent for purchase of water colors to be allocated to other marine hospitals. Competition is open to all American artists. The jury consists of Charles Burchfield, Eliot O'Hara, and John Marin. The price to be paid for each water color is \$30; contrary to usual Section practice, for practical reasons artists in this instance may submit signed works. Entries must not be glassed or framed, but double matted or backed with cardboard or mat board, for protection; mats must be uniformly either 24" by 30" or 20" by 26". Each artist may submit five paintings, no more. Last date for entries is November 15, 1940. Choice of subject matter is optional, but must be appropriate for hospital display. Artists are expected to submit all works with the understanding that



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they are available for public purchase. It is hoped to secure purchase through private channels for works not chosen by the jury.

The Section is sponsoring an open anonymous competition for the Marian Anderson Mural Fund Committee, which has raised funds by popular subscription for a mural to commemorate Marian Anderson's concert at the Lincoln Memorial. The mural, to be 6' 10" by 12' 6", will be placed in the Department of the Interior Building; the sum to be paid is \$1,700. Designs must be in on or before December 2, 1940. The scale must be three inches equals one foot. The jury consists of Gustaf Dalstrom, James A. Porter, Peppino Mangravite, Isabel Bishop, and Duncan Phillips.

Details of the Los Angeles competition, open to artists of California, Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming, may be obtained through Roland J. McKinney, Director, Los Angeles Museum of History, Science and Art.

Full information concerning all competitions should be secured from the Section of Fine Arts, Public Buildings Administration, Federal Works Agency, Washington, D. C.

#### Industrial Design Competition

THE MUSEUM OF MODERN ART has made preliminary announcement of an industrial design competition. For particulars write Eliot F. Noyes, Curator of Industrial Design, Museum of Modern Art, 11 West 53 Street, New York City.

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## PRE-COLUMBIAN ANDEAN ART

(Continued from page 515)

into the Introductory plane of culture from which, possibly with violence, Tiahuanaco had hoisted them.<sup>7</sup>

True, in the region around Tiahuanaco itself, and in the part of the coast nearest to Tiahuanaco, some faint survival of the "classical" tradition still flickered fitfully for a time. The resultant art is best termed Decadent Tiahuanaco. After that phase ended, the local traditions of art reasserted themselves. On the coast, Late Chimu and Late Nazca art faintly and imperfectly echoed Early Chimu and Early Nazca art. But, although great states with a quasi-feudal system of chiefs and sub-chiefs came into being again, along with imposing cities, the art of the Late Chimu-Late Nazca period was less vital and technically less perfect than that of the Early period. The former lasted from about 900 to the advent of the Incas, in the 14th and 15th centuries.<sup>8</sup>



It was about 1100 that the astonishing dynasty of the Incas began to rule at Cuzco, in the southern Peruvian highlands. Starting as a humble clan of llama-herders, the Incas in four centuries became overlords of a realm in both highlands and coastlands stretching north to northern Ecuador (Continued on page 547)

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## SEPTEMBER EXHIBITIONS

AMHERST, MASSACHUSETTS

Amherst College: Accessions of 1939-1940.

ANDOVER, MASSACHUSETTS

Addison Gallery of American Art: Posters (Museum of Modern Art); Sept. 6-23. Mahonri Young Retrospective Exhibition; Sept. 20-Nov. 24.

BALTIMORE, MARYLAND

Baltimore Museum of Art: Mexican Prints; Sept. 7-Oct. 5. Recent Accessions; to Sept. 29.

Walters Art Gallery: Sculptures by Five Americans; to Sept. 20. Viennese Porcelains; Sept. 20-Oct. 13.

BOSTON, MASSACHUSETTS

Museum of Fine Arts: Contemporary British Art; to Sept. 27.

BROOKLYN, NEW YORK

Brooklyn Museum: Americans & Europeans as Seen by Oriental Artists; to Sept. 29. Coney Island 1903-1909 to Sept. 22. Animals Under Ten Inches; to Sept. 30. Shawls, Capes, & Lappets; to Oct. 6. 18th Century English & French Prints.

Buffalo, New York

Albright Art Gallery: Scenes & Characters from The Long Voyage Home Painted in Hollywood by Benton, Biddle, Chapin, Fiene, Philipp, Quintanilla, Schreiber, Soyer, & Wood; to Oct. 18.

CHICAGO, ILLINOIS

Art Institute of Chicago: Chicago Sculpture. Exhibition of Work by Ten Chicago Painters. Auditorium Drawings by Louis Sullivan and Dankmar Adler. Prints Since 1900. Development of Transfer Print in 18th & 19th Century Ceramics; to Oct. 20.

CINCINNATI, OHIO

Cincinnati Art Museum: French 19th & 20th Century Prints; to Sept. 22. Chiaroscuro Prints; to Sept. 22. Development of American Painting.

CLAREMONT, CALIFORNIA

Pomona College: Retrospective Exhibition of Student Work; to Sept. 30.

CLEVELAND, OHIO

Cleveland Museum of Art: French 16th & 17th Century Prints; Sept. 17-Nov. 3. Salon of Photography; Sept. 25-Oct. 27.

DAYTON, OHIO

Dayton Art Institute: Mexican Exhibition; to Sept. 30.

DETROIT, MICHIGAN

Detroit Institute of Arts: Paintings by Candido Portinari; to Sept. 29.

DENVER, COLORADO

Denver Art Museum: Paintings by Artists West of the Mississippi; Sept. 3-30.

DURHAM, NORTH CAROLINA

Duke University: Leading American Water Colorists (AFA); Sept. 15-30.

ESSEX FELLS, NEW JERSEY

Marsh Gallery: Etchings by Isabel Bishop, Prints by Fiske Boyd. Lithographs by Minna Citron & Leonard Pytlak; to Sept. 15.

GREEN BAY, WISCONSIN

Neville Public Museum: Water Colors by L. V. A. Pohl; to Sept. 15.

HAGERSTOWN, MARYLAND

Washington County Museum: Paintings &

Sculptures from Permanent Collection; to Oct. 1.

HARTFORD, CONNECTICUT

Wadsworth Atheneum: Children's Work; to Sept. 13. Paintings; Sept. 15-29.

HONOLULU, HAWAII

Honolulu Academy of Arts: Pacific Island Art. KANSAS CITY, MISSOURI

Kansas City Art Institute: Student Work; Sept. 1-30.

William Rockhill Nelson Gallery: Persian Miniatures. Photographs by George Platt Lynes. English Pottery & Porcelain; to Sept. 30.

Los Angeles, California

Los Angeles Museum: Old Masters from 1939 New York World's Fair; to Sept. 15. Sanity in Art Exhibition; to Sept. 27. One Man Show by Emil Kosa, Jr.; to Sept. 30.

MANCHESTER, NEW HAMPSHIRE

Currier Art Gallery: Oils & Water Colors by Contemporary American Artists; to Sept. 30.

MEMPHIS, TENNESSEE

Brooks Memorial Art Gallery: Hooked Rugs; Sept. 22-30.

MILWAUKEE, WISCONSIN

Milwaukee Art Institute: 19th International Water Color Show; Sept. 5-Oct. 6. Paintings & Plastics in Sheet Metal by Edmund Kinzinger; to Sept. 30. Paintings by Frances Buholz; to Sept. 30. Royal Copenhagen Stoneware; Sept. 1-25.

MINNEAPOLIS, MINNESOTA

Walker Art Center: Architecture, Planning & Housing Exhibition; from Sept. 19.

MONTCLAIR, NEW JERSEY

Montclair Museum: Silk Screen Prints. Work by Society of American Etchers; to Sept. 30.

NEWARK, NEW JERSEY

Newark Art Museum: American Primitive Paintings; to Sept. 14. Early American Spinning & Weaving; to Sept. 7. Elements of Painting & Sculpture; to Sept. 14.

NEWPORT, RHODE ISLAND

Newport Art Association: Contemporary Argentine Art (AFA); to Sept. 15.

NEW YORK CITY

Artists Gallery, 113 W. 13 St.: Group Exhibition of Paintings & Sculptures; to Oct. 1.

Associated American Artists, 711 5th Ave.: Scenes & Characters from The Long Voyage Home Painted in Hollywood by Benton, Biddle, Chapin, Fiene, Philipp, Quintanilla, Schreiber, Soyer, & Wood; to Sept. 10. Original Drawings by Lewis Daniel for Walt Whitman's Leaves of Grass; Sept. 3-16. Exhibition by An American Group; Sept. 16-Oct. 5.

Durand-Ruel, 12 E. 57 St.: 19th Century French Painting.

Ferargil Gallery, 63 E. 57 St.: Group Exhibition by American Artists; to Sept. 15.
Annual Exhibition of Early American Painting; Sept. 16-30.

Grand Central Art Galleries, 15 Vanderbilt Ave.: Annual Founder's Show; to Nov. 7. Garden Sculpture; to Sept. 30.

Kraushaar Galleries, 730 5th Ave.: American Paintings & Water Colors; to Oct. 1. Metropolitan Museum of Art, 5th Ave. & 82 St.: Contemporary American Industrial Art; to Sept. 15. Masterpieces of Enameling; to Sept. 22. Historic Exhibition of Woodcuts.

Midtown Galleries, 605 Mad. Ave.: Group Exhibition.

Milch Galleries, 108 W. 57 St.: Paintings by Contemporary American Artists.

Morgan Library, 29 E. 36 St.: Special Exhibition of Drawings, Books & Manuscripts.

Morton Galleries, 130 W. 57 St.: Water Colors
& Oils by Group; Sept. 23-Oct. 5.

Museum of Modern Art, 11 W. 53 St.: Twenty Centuries of Mexican Art; to Sept. 30.

New York Public Library, 5th Ave. & 42 St.: Spanish & Portuguese Book Illustrations. "Good Prints". Arthur Rackham's Illustrations. Americana. Drawings for Illustrations. Recent Accessions; to Sept. 30. Nierendorf Gallery, 18 E. 57 St.: Art of the

20th Century.

Georgette Passedoit, 121 E. 57 St.: Contem-

porary French Painting.

Perls Galleries, 32 E. 58 St.; Modern French Painting.

F. K. M. Rehn, 683 5th Ave.: Paintings & Water Colors by American Artists; to Sept. 30.

Riverside Museum, 310 Riverside Drive: Latin-American Exhibition; to Sept. 29. Robinson Galleries, 126 E. 57 St.: Limited

Editions Sculptures.

Schaeffer Galleries, 61 E. 57 St.: Old Masters. Society of Designer-Craftsmen, 64 E. 55 St.: Ceramics, Furniture, Textiles, Rugs, Metals, Jewelry, Enamel, Wood Marquetry, Light Fixtures; to Sept. 10.

Studio Guild, 730 5th Ave.: Group Exhibition of Painting & Sculpture; to Sept. 28.

Walker Galleries, 108 E. 57 St.: Paintings for Young Collectors; Sept. 9-28.

Weyhe Gallery, 794 Lex. Ave.: Selected Drawings & Prints.

Norfolk, Virginia

Norfolk Museum: Chinese Ceramics, Indian Artifacts, Photographs, Paintings, Sculptures, & Drawings; to Sept. 30.

OAKLAND, CALIFORNIA

Oakland Art Gallery: Water Colors, Pastels, Drawings, & Prints; Sept. 29-Oct. 27.

Omaha, Nebraska

Joslyn Memorial: Philadelphia Water Color Club Rotary (AFA); Sept. 1-30.

PHILADELPHIA, PENNSYLVANIA

Philadelphia Museum: Life in Philadelphia; to Sept. 22. International Exhibition of Sculpture; to Oct. 1.

PITTSBURGH, PENNSYLVANIA

Carnegie Institute: Survey of American Painting; Oct. 24-Dec. 15.

PITTSFIELD, MASSACHUSETTS

Berkshire Museum: Paintings by Robert T. Francis. Annual Exhibition Pittsfield Art League. Shaker Furniture & Crafts; to Sept. 30.

PORTLAND, OREGON

Portland Art Museum: Ancient Chinese Sculpture; to Sept. 15. Contemporary European & American Figure Paintings; to Sept. 15. William Harnett Paintings; to Sept. 15.

(Continued on page 548)

(Continued from page 544)

and south into Argentina and Chile. Theirs was one of the most perfect and just political and social structures ever seen, a system which suffered no want, no misery, and no idleness to exist within its realm.<sup>9</sup>

Artistically, the Inca period is marked by new shapes in pottery and by new styles of decoration on many materials. Its esthetic ideas owed but little to former periods. Unfortunately, however, although Inca art is the latest native Andean art, it is also one of the least well represented styles in our museums. Much of what we have from the Inca period comes through the work of Dr. Hiram Bingham and his Expeditions at Machu Picchu and elsewhere in the southern Peruvian highlands. Museums in Peru, on the other hand, are exceedingly rich in Inca art, largely because of the magnificent archeological work done by Dr. Luís Valcárcel at the

fortress of Sacsahuamán, near Cuzco, and at other sites in and around the old Inca capital.<sup>10</sup>

It remains true, however, that Inca art is relatively scarce both in collections outside Peru and in those in Peru. This is explained by the fact that it was in being when the Spaniards arrived, about 1530, so that much of it fell victim to their destructive frenzy. Only objects safe in tombs or hidden away in Machu Picchu, Sacsahuamán and other unmolested places escaped ravishment. Nevertheless, the more intelligent Spaniards were impressed by what they saw of Inca art and, in the colonial period, their own art was often deeply influenced by it.

This is the first of four articles on ancient Andean art by Mr. Means. The next will be published in November. — EDITOR

#### NOTES

<sup>1</sup> These points are magnificently developed by Professor A. J. Toynbee in A Study of History especially Vol. 1, pp. 321-323, Vol. II, pp. 208 300, Vol. III, pp. 112-173.

See: Uhle, 1906; 1912; Spinden, in Means, 1917, pp. 390-392; Means,
 1918; 1918b; 1919; 1931, Ch. II; Lothrop, 1926. (For full bibliographical

references see Bibliography.)

<sup>a</sup> Means, 1931, pp. 108-116. Posnansky, 1914. Stübel and Uhle, 1892. <sup>4</sup> For Early Chimu and Early Nazca art consult: Lehmann and Doering, 1924; Larco-Hoyle, 1938; Means, 1917; 1931, Ch. III; Schmidt, 1929; Tello, 1917; 1918; 1929; 1938; Uhle, 1908; 1913; Berthon, 1911; Putnam, 1914; Kroeber, 1925; 1926; 1927. (The reader will understand that these references are but a small proportion of the number which could be given. They will, however, serve to point the way for those who wish to pursue the subject further.)

<sup>5</sup> Means, 1917, pp. 324-326, 351-368; 1931, Ch. III, section 4, and

Ch. IV; Bennett, 1936; Posnansky, 1914; Uhle, 1903.

Montesinos, 1920. Poma de Ayala, 1936. Tello, 1939.
For Tiahuanaco II art, consult: Lehmann and Doering, 1924;
Means, 1917; 1931, Chs. IV and V; Schmidt, 1929; Stübel and Uhle, 1892; Reiss and Stübel, 1880-1887; Baessler, 1902-1903; Posnansky, 1914; Bennett, 1936, pp. 497-506.

8 See: Means, 1931, Ch. V. Also various general works already cited,

and likewise Bennett, 1931.

<sup>9</sup> See: Baudin, 1927; 1928; 1929; Minnaert, 1925; Means, 1931, Chs. VI-IX, inclusive.

<sup>10</sup> For Inca art see especially: Bingham, 1913; 1930; Valcárcel, 1923; 1924; 1933; 1934-1935.

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#### SEPTEMBER EXHIBITIONS

(Continued from page 546)

PROVIDENCE, RHODE ISLAND

Rhode Island School of Design Museum:
American Folk Art. Paintings & Water
Colors. Acquisitions of Pre-Columbian Art.
Chinese, Japanese & East Indian Costumes.
Fan-Shaped Prints from Rockefeller Collection.

RICHMOND, VIRGINIA

Virginia Museum of Fine Arts: Historic Building Survey; Sept. 16-30.

ROCHESTER, NEW YORK

Memorial Art Gallery: Permanent Collection; to Oct. 6.

St. Louis, Missouri

City Art Museum: 7th International Lithography & Wood Engraving Exhibition; to Sept. 22. Batiks by St. Louis Artists; Sept. 24-Oct. 15.

SAN DIEGO, CALIFORNIA

Fine Arts Gallery: Sculptures by Margo Allen. Drawings & Lithos. by Malcolm Cameron.

SAN FRANCISCO, CALIFORNIA

San Francisco Museum: Water Colors by Lyonel Feininger; to Sept. 15. Children's Paintings; to Sept. 29. Balinese Paintings & Wood Carvings; to Sept. 15.

SEATTLE, WASHINGTON

Seattle Art Museum: Contemporary European & American Paintings & Sculptures. 14th to 19th Century Prints. Paintings by Seattle Artists. Mohammedan Art. Art of Japan & China. Facsimiles of Drawings by Flemish, Italian, French & Dutch Masters; to Sept. 29.

SPRINGFIELD, MASSACHUSETTS

Springfield Museum: Exhibition by Spring-field Artists' Union; Sept. 16-29.

STATE COLLEGE, PENNSYLVANIA

College Art Gallery: Water Color & Print Techniques Demonstrated by Pennsylvania Art

Project; Sept. 15-30.

TOLEDO, OHIO

Toledo Museum: National Ceramic Exhibition; Sept. 1-29. Handwoven Textiles.

UTICA, NEW YORK

Community Arts Program: Honolulu Academy Art Exhibit (AFA); Sept. 29-Oct. 29.

WASHINGTON, D. C.

Corcoran Gallery: Work by Art School Faculty; to Sept. 30.

Whyte Gallery: Paintings, Water Colors & Prints by Artists of Washington & Vicinity.

WILMINGTON, DELAWARE Society of Fine Arts: Crafts by Adult Education Groups of Delaware; Sept. 15-Oct. 6.

WILMINGTON, NORTH CAROLINA
Wilmington Museum: New England Coast
by Massachusetts Artists. Reproductions

of Dürer Prints.
WORCESTER, MASSACHUSETTS

Worcester Art Museum: Japanese Prints from Bancroft Collection

### TEACHING EXPERIENCE OF ART

(Continued from page 534)

Renaissance is witnessed by the accompanying reproduction of a drawing of the sixteenth century.

With Masaccio we see how light and dark may be used to reveal form. It is interesting to do a still-life in chiaroscuro, another in flat pattern shapes, and another in simple functional color-tones in the manner of mosaic. Some experiments have been made in true fresco. The developments in the illusion of space, of new rhythmic organizations, of effects of light for their own sake, all are grist to our busy mill. We are far too busy. Sometimes it is suggested that a girl take her study to her room and live with it, because contemplation plays so great a part in the development of real feeling. If the work is superficial at least we never lose sight of the fact that we are merely learning a little about some of the things that are to be known, some of the ways open to much further exploration.

These notes are but a partial account of our activities. Each year the work varies somewhat. There is not too much routine because it is felt that any inventive urge may be of value to the student. Such a course will lose its purpose by becoming too intellectual and theoretical. Poetry was born before grammar, and it is sympathy with the plastic-poetic sense that we are trying to foster. I say foster because the embryo of art feeling is in everyone as is witnessed by the love of flowers, or the interest in the proportions, colors, textures of clothing.

But how can girls with no training attempt so much? The fact is that our best students are most often those with no previous training, because a petty naturalism without esthetic purpose is still the chief aim of most teachers of the young. But there are sometimes girls whose abilities are so limited that they become discouraged and say they cannot see the sense of going on. They are asked to look into

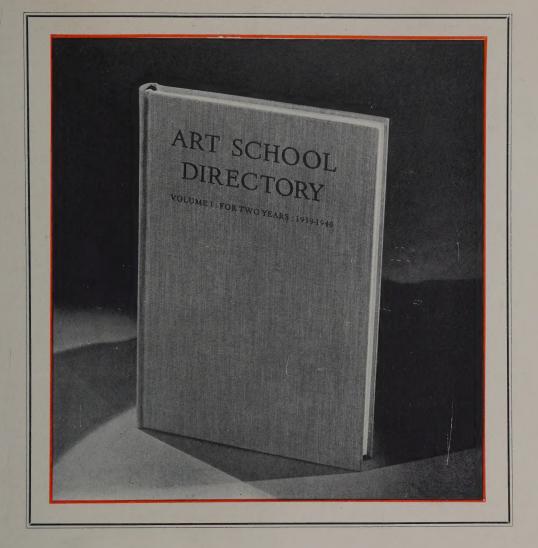
their minds and see if there are no results there, if the mental processes are not different on account of the studio work. With one exception in the six years they have all agreed that their observations and reactions are quite different on account of the practice in drawing and painting. The exception was a girl who "cut" the studio hours so often that the work had to be made up the following year to secure credit for the course. Later she came to me with embarrassment. Would I take her into my advanced lecture course after all the trouble she had given me? She found that, after all, the history of art was her favorite subject and she was to major in that field. Of course I was pleased that our struggles had not killed her interest.

The problem of supplies for such work is not simple, but experience has evolved the easiest and least expensive way. We draw on gray "bogus" paper, and paint on it with oils, or on a type of wax paper used in kitchens. This wax paper is pressed into a shallow pan for the oil palette and thrown away after use. Everything but the drawing boards is used collectively. The cost for the year to each student for three hours' studio work a week is about four dollars.

We sometimes discover a vital and original sense of pictorial design in a student. It seems to me a good way to begin professional study. In some professional schools so much time is given to learning to draw and paint the nude that the student does not discover until years of training have passed that he or she has really nothing to say with the acquired skill.

In this college course an equal amount of time is given each week to reading from the best literature of criticism. When the vocabulary of criticism is understood through the experience of art, the foundations of true understanding are laid.

Above all the teacher must encourage the honest reactions of the student, and give each student as much individual consideration as possible.



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